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1981 STATISTICAL REPORT OF THE

FIRE COMMISSIONER

Alberta

LABOUR
GENERAL SAFETY SERVICES DIVISION
FIRE PREVENTION BRANCH

TABLE OF CONTENTS

INTRODUCTION 1
Fire Prevention Branch Activities 4

SECTION ONE - ALBERTA FIRE CASUALTIES 7
Deaths Involving Fire and Fire Deaths 9
Death Rates 10
Deaths by Geographic Location 11
Casualties by Age and Sex 12
Circumstances Contributing to Casualties 12
Casualties by Month 13
Casualties by Hour of Day 14
Casualties by Major Property Classifications 15
Casualties by Act or Omission 17

SECTION TWO - ALBERTA FIRE LOSS INFORMATION 19
Fires and Losses, 1972-1981 21
Fire Rates and Per Capita Losses, 1972-1981 22
Average Loss Per Fire, 1972-1981 22
Fire Losses Related to Economic Indices, 1972-1981 23
Average Number of Fires by Month, 1972-1981 24
Average Fire Loss by Month, 1972-1981 24
Average Numer of Fires by Day of Week Per Year, 1972-1981 25
Average Fire Loss by Day of Week Per Year, 1972-1981 25
Average Number of Fires by Hour of Day Per Year, 1972-1981 26
Average Fire Loss by Hour of Day Per Year, 1972-1981 26
Fires by Loss Category, 1981 27
1981 Large Loss Fires 28
Fires by Major Property Classifications, 1981 29
Property Losses Related to Area of Origin, 1981 31
Property Losses Related to Act or Omission, 1981 32
Property Losses Related to Source of Ignition, 1981 33
Property Losses Related to Fuel or Energy, 1981 34
Property Losses Related to Material First Ignited, 1981 35
Municipal Fire Loss Statistics, 1981 36

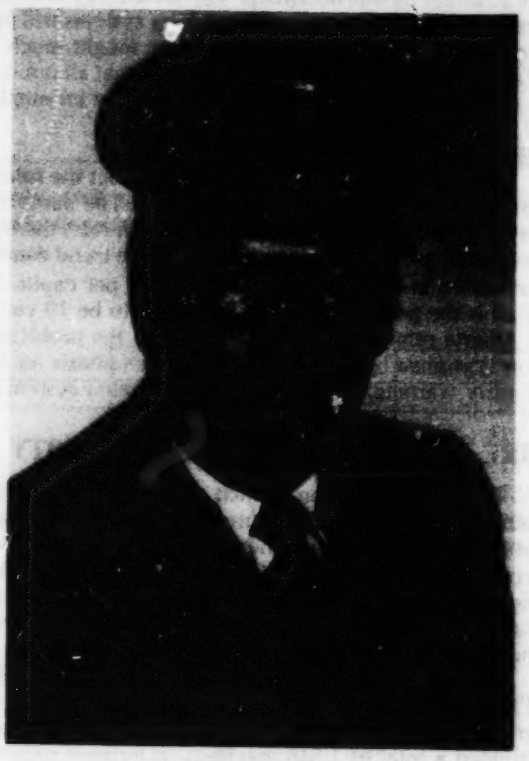
SECTION THREE - GLOSSARY OF TERMINOLOGY 43

DIRECTORY OF BRANCH OFFICES 47

INTRODUCTION

62ND STATISTICAL REPORT OF THE FIRE COMMISSIONER

This statistical report has been divided into three parts. The first contains information on fire casualties in the Province of Alberta for the calendar year 1980. The second contains information on the fires and resulting property losses. Section three is a Glossary of Terminology.



W.D. MacKay
Fire Commissioner

REPORTING METHODS

The fire losses and fire casualties included are those reported to the Fire Prevention Branch in accordance with the procedures legislated by the Fire Prevention Act. The Branch encourages the use of this information in the hope that it will contribute to reducing fire casualties and property losses in Alberta. More detailed information may be available from Branch records; your queries are welcome.

The fire loss and fire casualty data is collected and tabulated in accordance with the fire reporting procedures developed and recommended by the Association of Canadian Fire Marshals and Fire Commissioners (ACFM/FC) in the manual entitled, "Manual of Uniform Practices for Collecting and Tabulating Fire Loss Statistics, May 1971". All provinces and territories in Canada have indicated their intention to use this system. Not all, however, are using this system. Persons using the data are cautioned against making comparisons with other provinces not yet utilizing the statistical system recommended by the ACFM/FC.

FIRE CASUALTIES

In 1981, fire deaths in Alberta increased to 67, up from 55 the previous year. This represents in a 27% increase in the fire death rate.

There were 53 fire deaths in private dwellings, unchanged from 1980. Because the population increased, the fire death rate declined slightly in 1981 to 2.3 from 2.5 the previous year. The continuing high level of fire deaths in private dwellings is of great concern, particularly since the number of fires in this occupany has been steadily decreasing since 1971.

People cause fires and people die from fires. But people can also prevent them. Fire safety is an individual responsibility — not a responsibility that lies solely in the hands of fire department personnel. Their function basically is to provide assistance to those responsible for fire prevention and to suppress fires. A greater public awareness of fire prevention is needed to reduce the unnecessary waste of human life and property.

RESIDENTIAL FIRES

It is encouraging to report some improvement in the residential fire problem. Branch records indicate that the number of one and two family dwelling fires has decreased significantly. In 1971 there were 85 fires reported per 10,000 dwelling units. By 1981, this figure had dropped to 38, a decrease of 55%. The improvement in the dwelling fire picture was marked in yet another way. In 1971, one and two family dwelling fires accounted for 42.5% of all fires in Alberta; by 1981 this figure had declined to only 18.7%. However, the losses sustained in these dwelling fires continue to increase. Even when losses were discounted by the Consumer Price Index (to nullify the effects of inflation) the per capita loss per dwelling fire increased 100% between 1972 and 1981. Expressed in 1981 dollars, the per capita dwelling fire loss in 1972 was $4.57 and in 1981, $9.10. As this report shows, there is a trend towards larger fires. Methods of dealing with this problem must be determined and implemented if fire losses are to be kept to an acceptable level.

LARGE LOSS FIRES

In 1981 there was a significant reduction in the number of fires exceeding $500,000 in damage and their resulting losses compared to 1980. In 1980 there were 63 "large loss" fires which destroyed $105 million in property. However, in 1981, there were 33 such fires, with losses of $47 million. This decline represents an approximate 50% decrease in both the number of fires and their losses. These 33 fires (.26% of all fires) caused 40% of the fire losses in 1981. Fires in industrial manufacturing establishments contributed $16 million to the loss picture with one chemical plant fire reported at $7 million. Industrial storage property fires added $12 million, and assembly building fires, nearly $9

million. There is a growing recognition that many of these fires are beyond the capability of the municipal fire department to control. It has been suggested that more responsibility should be placed on the building owner to protect both the structure and its occupants. The technology is available to allow the owner to do this. Detection systems "discover" fire in its early stages and extinguishing systems will put out the fire or at least hold it in check until the fire department arrives. A fire in its early stage can be fought much more effectively by any fire department. Given the limitations of most fire departments, it is important that all options for fire control are examined and the methods that will result in the greatest saving of lives and property be employed.

FIRE IN THE FUTURE

If past experience can be used to predict the future fire losses, then the future looks bleak. Some major intervention is needed to alter the existing trend. The number of fires reported each year has been growing at a rate of 4.4% per year. Based on the established growth rate, the number of fires will have increased to 16,400 by 1990. Fire losses have been growing at a rate of 8.8%. If the trend continues, by 1990 the losses can be expected to exceed $250 million (expressed in 1981 dollars). In 1963, the per capita fire loss was $14 (expressed in 1981 dollars). In 1981, it is $55. What is the per capita cost of fire going to be 10 years from now? The established trend of property losses from fire in Alberta reinforces the suggestion that the problem needs to be given careful consideration and that a new course of action must be developed. Greater emphasis on fire prevention and public education, combined with better use of early warning and automatic suppression systems, appears to be the key to reversing the grim trend.

FIRE PREVENTION BRANCH ACTIVITY

The Fire Prevention Branch strives to reduce (1) the number of injuries and deaths caused by fires, and (2) the number of fires and related property damage. In co-operation with municipal fire departments, branch personnel inspect buildings to ensure they meet acceptable levels of fire safety. They investigate fires and assist police and fire departments with fire investigations. The branch develops and presents training and information programs for municipal and industrial fire department personnel throughout the province. In addition to providing technical assistance to municipalities on fire prevention and protection, the branch provides information on fire safety to the general public, and collects and disseminates statistical information on fires.

Fire prevention is a major activity of the branch. This includes a public education program dealing with the hazards of fire, sources of ignition and methods of preparing for fire. In the past three years the number of meetings and lectures to enhance understanding of this subject has more than doubled. In the current reporting period 34,831 people attended a total of 1,546 meetings or lectures presented by the branch.

During the period under review fire prevention activities were strengthened through an expanded use of the concept of regional mutual co-operation between fire departments. This was accomplished by the formation of six regional fire prevention organizations. The purpose of these organizations is to encourage municipal fire departments within defined areas or regions of the Province to meet and to discuss mutual concerns such as mutual aid, fire investigations and fire prevention programs.

Fire services, which involves the training of fire service personnel and the provision of technical assistance to municipal fire departments, is the second major activity of the branch. Most of the training is conducted at the Alberta Fire Training School in Vermilion. During 1981-82, 726 municipal firefighters and 211 industrial firefighters attended school courses. Development work continued during the year on training courses for fire officers, fire prevention officers and industrial firefighters. Courses were developed for industrial firefighters, and 75% of the development work was completed on the first level of fire officer training. A new initiative involving local training utilizing programs developed at the Alberta Fire Training School was introduced. Eighty received training from their local fire departments and were awarded certificates by the Alberta Fire Training School.

Seminars on various aspects of fire suppression were conducted in 52 locations throughout the Province. Subjects included the handling of dangerous goods and metric conversion. Altogether, some 650 persons attended the seminars. Also, four basic firefighter/pump operator seminars were conducted for 36 fire department personnel.

The branch is also directly involved in the field of fire investigation. The number of investigations has increased in the last three years. Investigations conducted by the branch have increased 21% from the previous fiscal year, to 339 in 1981-82. In addition, some 1,137 investigations were conducted in co-operation with other groups such as police departments, insurance investigators and fire departments. During the reporting period, the branch identified 15 fire department personnel in the province who have been trained to assist the branch in conducting fire investigations.

Other investigation activities include: 137 insurance adjusters were familarized with fire reporting methods and preliminary investigation procedures, and 11 lectures on arson investigation were presented to more than 300 police and fire department personnel. During the year, 1,076 investigations confirmed arson as the cause of fire, compared to 943 investigations in 1980-81 and 784 investigations in 1979-80 where arson was confirmed. It is difficult to determine whether the figures indicate a rise in the number of arson fires or reflect an improvement in arson detection techniques.

FIRE PREVENTION ACTIVITY

	1979-80	1980-81	1981-82
	No.	No.	No.
Building fire inspections conducted	3,214	3,001	3,123
— recommendations to correct hazards issued	14,970	8,399	9,892
Plans examined	558	474	749
Meetings and lectures conducted	792	1,010	1,546
— attendance	15,361	22,758	34,831

Continued efforts to assist and support the municipal fire service have resulted in more requests for seminars and lectures by Branch staff at the local level. Fire service personnel are conducting more of their own inspections after receiving training and assistance from the Provincial Fire Prevention Officers.

FIRE SERVICE PERSONNEL TRAINING

	1979-80	1980-81	1981-82
Alberta Fire Training School Attendance	No.	No.	No.
Part I Firefighter	167	182	217
Part II Firefighter	115	113	111
Part III Firefighter	88	101	73
Part IV (new initiative)	—	—	20
Pump Operator "A"	24	28	37
Pump Operator "B"	7	15	21
Fire Service Instructor	49	42	23
Part I Fire Investigation	158	148	19
Fire Prevention for Firefighters	40	34	22
Fire Officer "C1"	—	33	36
Fire Officer "C2" (new initiative)	—	—	22
Sub—Total	648	696	601
Extension Courses			
Part I Firefighter	—	—	24
Part I Fire Investigation	—	—	72
Fire Service Instructor	—	—	12
Fire Officer "C1"	—	—	17
Sub—Total	—	—	125
Local Presentation			
Part I Firefighter	—	43	80
TOTAL	648	739	806

Industrial Training	1978-79	1979-80	1980-81
	No.	No.	No.
Part II Industrial Firefighter	—	—	65
Seminars for Industrial Personnel	58	40	146
TOTAL	58	40	211

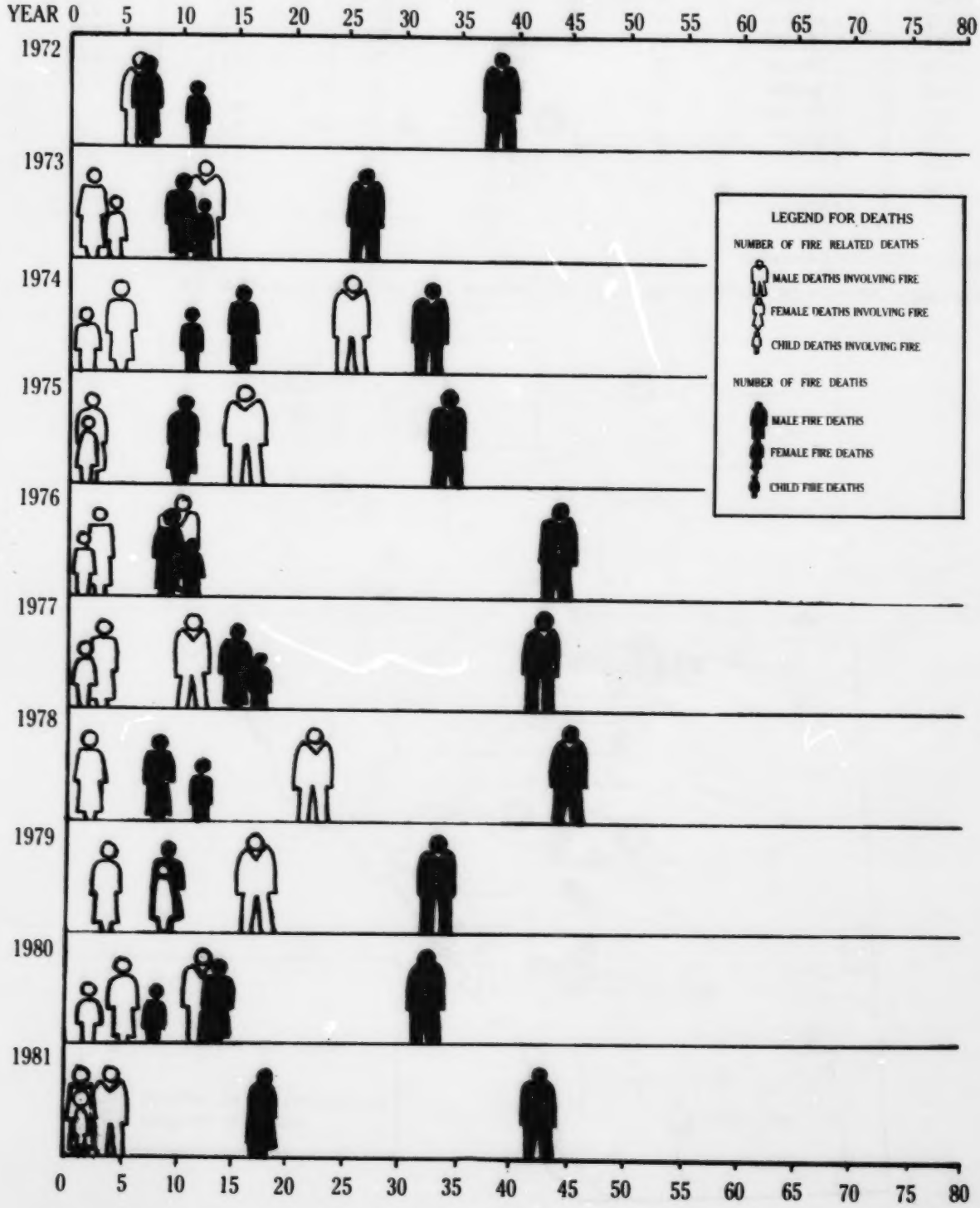
The slight decrease in attendance at the Alberta Fire Training School has been offset by the presentation of extension courses and the local presentation of the Part I Firefighter course, resulting in an overall increase in course completion of 10.2%. The new course Fire Officer "C2" covering principles of leadership has been very well received and senior officers continue to work with Branch staff in further Fire Officer course development. The first industrial firefighter training courses were presented using the new flammable liquid training area with the 65 participants learning and practising extinguishment techniques using dry chemical, water fog and foam application.

FIRE INVESTIGATION	1979-80	1980-81	1981-82
	No.	No.	No.
Investigations conducted by the Branch	162	279	339
Investigations conducted by other agencies	803	1,100	1,137
TOTAL	965	1,379	1,476
Causes of fires investigated			
- arson	784	943	1,076
- accidental or unknown	175	428	400
- under investigation	6	8	—
TOTAL	965	1,379	1,476

SECTION ONE
ALBERTA FIRE CASUALTIES

DEATHS INVOLVING FIRE AND FIRE DEATHS

Fire deaths refer to persons who died directly as a result of the fire, either by smoke inhalation or burns. Deaths **involving** fire refer to persons who were in a place where fire occurred, but who died from a cause other than the fire itself (e.g. a person who dies from impact in an automobile accident where the vehicle catches fire).



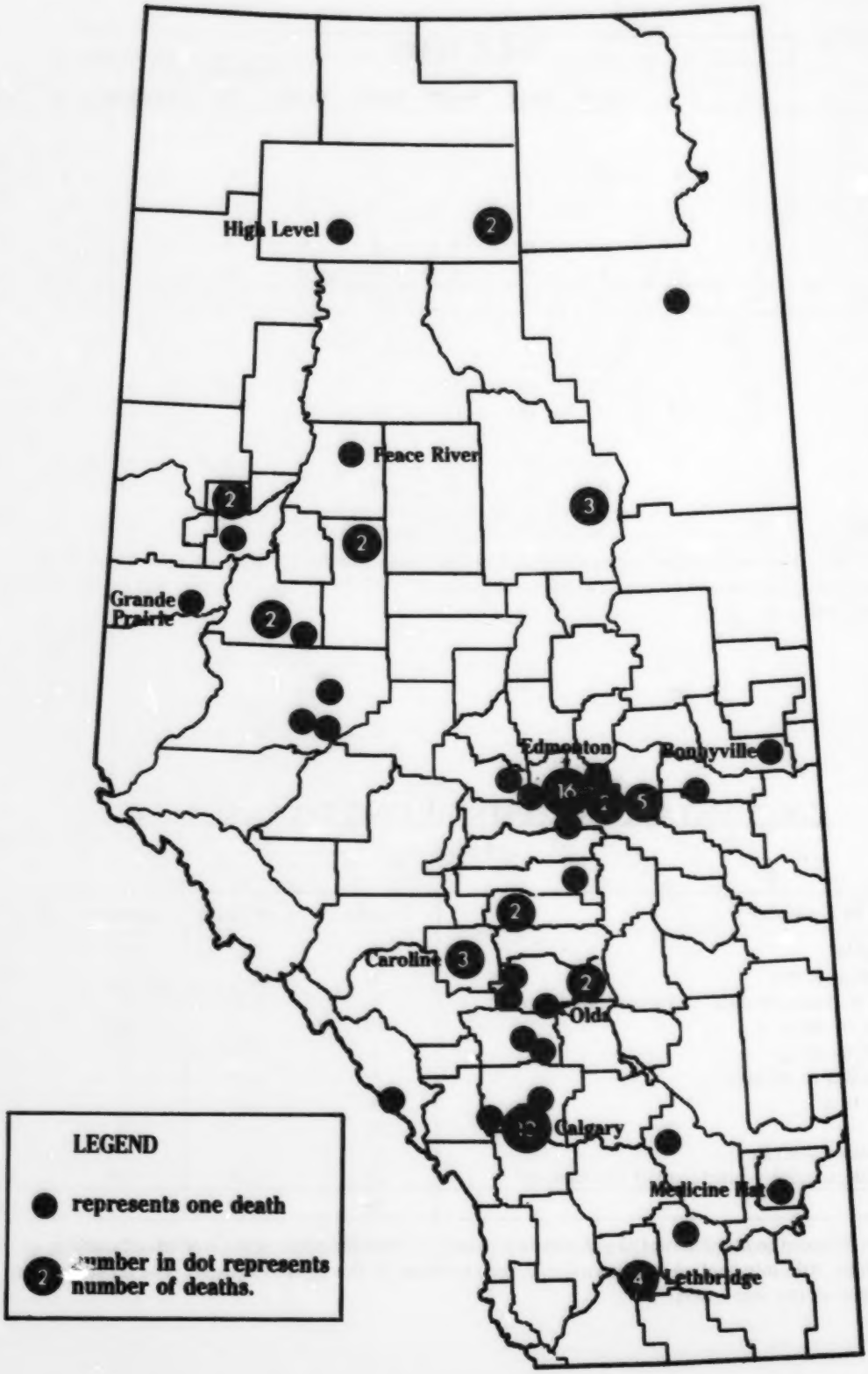
DEATH RATES

	ALBERTA					CANADA
Year	Population	Fire Deaths	Other Deaths Where Fire Involved	Total Deaths	Fire Death Rate*	Fire Death Rate*
1972	1,657,000	57	7	64	3.4	3.8
1973	1,690,000	49	16	65	2.9	3.2
1974	1,722,000	61	31	92	3.5	4.1
1975	1,778,000	55	19	74	3.1	3.5
1976	1,838,000	64	14	78	3.5	3.7
1977	1,894,000	76	16	92	4.0	3.4
1978	1,954,000	66	25	91	3.4	3.6
1979	2,014,000	51	21	72	2.5	3.1
1980	2,146,000	55	21	76	2.6	3.4
1981	2,278,000	77	6	83	3.6	N/A

*Deaths per 100,000 population

Commentary: Alberta's fire death rate increased 38% between 1980 and 1981, from 2.6 to 3.6.

DEATHS BY GEOGRAPHIC LOCATION 1981



CASUALTIES BY AGE AND SEX
1981

Casualty	AGE IN YEARS 0-5	6-15	16-25	26-35	36-45	46-55	56-65	Over 65	Unknown	Total
Deaths										
Civilian:										
Male	8	4	13	9	3	9	6	6	0	58
Female	6	0	6	1	4	4	2	2	0	25
Firefighter:										
Male	0	0	0	0	0	0	0	0	0	0
Female	0	0	0	0	0	0	0	0	0	0
Total Deaths	14	4	19	10	7	13	8	8	0	83
Injuries										
Civilian:										
Male	3	16	53	48	23	21	14	10	87	275
Female	5	12	16	14	10	6	2	6	15	86
Firefighter:										
Male	0	0	16	32	22	5	0	0	17	92
Female	0	0	0	0	0	0	0	0	0	0
Total Injuries	8	28	85	94	55	32	16	16	119	453

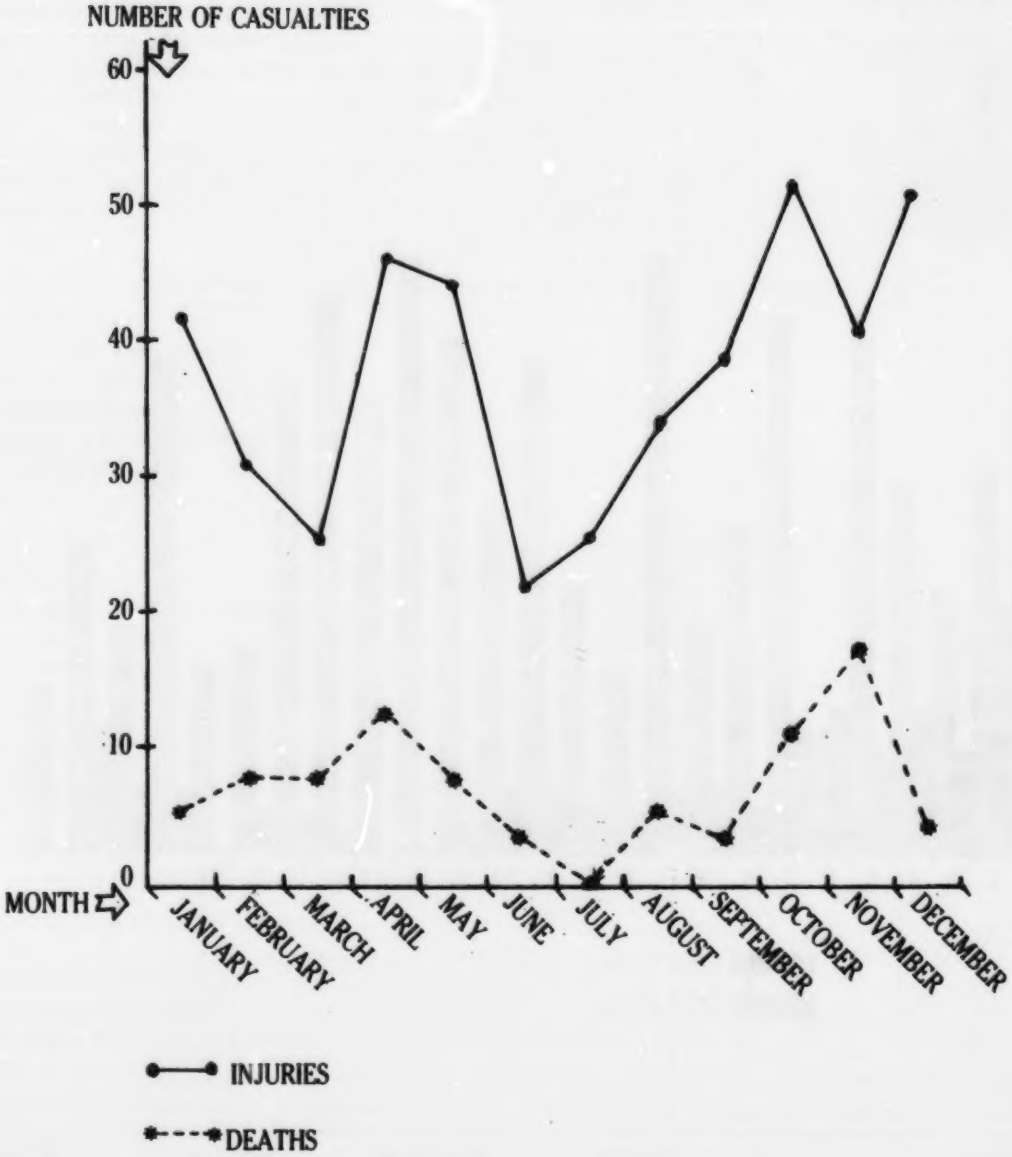
Commentary: Many fire studies have suggested that it is the young and the old who are most likely to die from fire. In Alberta, this does not appear to be true. Deaths were greatest in the 16-25 age category, and injuries were greatest in the 26-35 age category.

CIRCUMSTANCES CONTRIBUTING TO CASUALTIES
1981

Condition of Casualty	Deaths	% of Total	Injuries	% of Total
Not applicable	8	9.6	219	48.3
Asleep at time of fire	30	36.1	57	12.6
Bedridden or other physical or mental handicap	4	4.8	3	.7
Impairment by alcohol	13	15.7	18	4.0
Impairment by drugs	1	1.2	0	—
Under restraint or detention	1	1.2	0	—
Too young to act	4	4.8	1	.2
Senile	0	—	0	—
Left unattended (children)	0	—	1	.2
Condition of casualty — unclassified or unknown	22	26.5	154	34.0
TOTAL	83	99.9	453	100.0

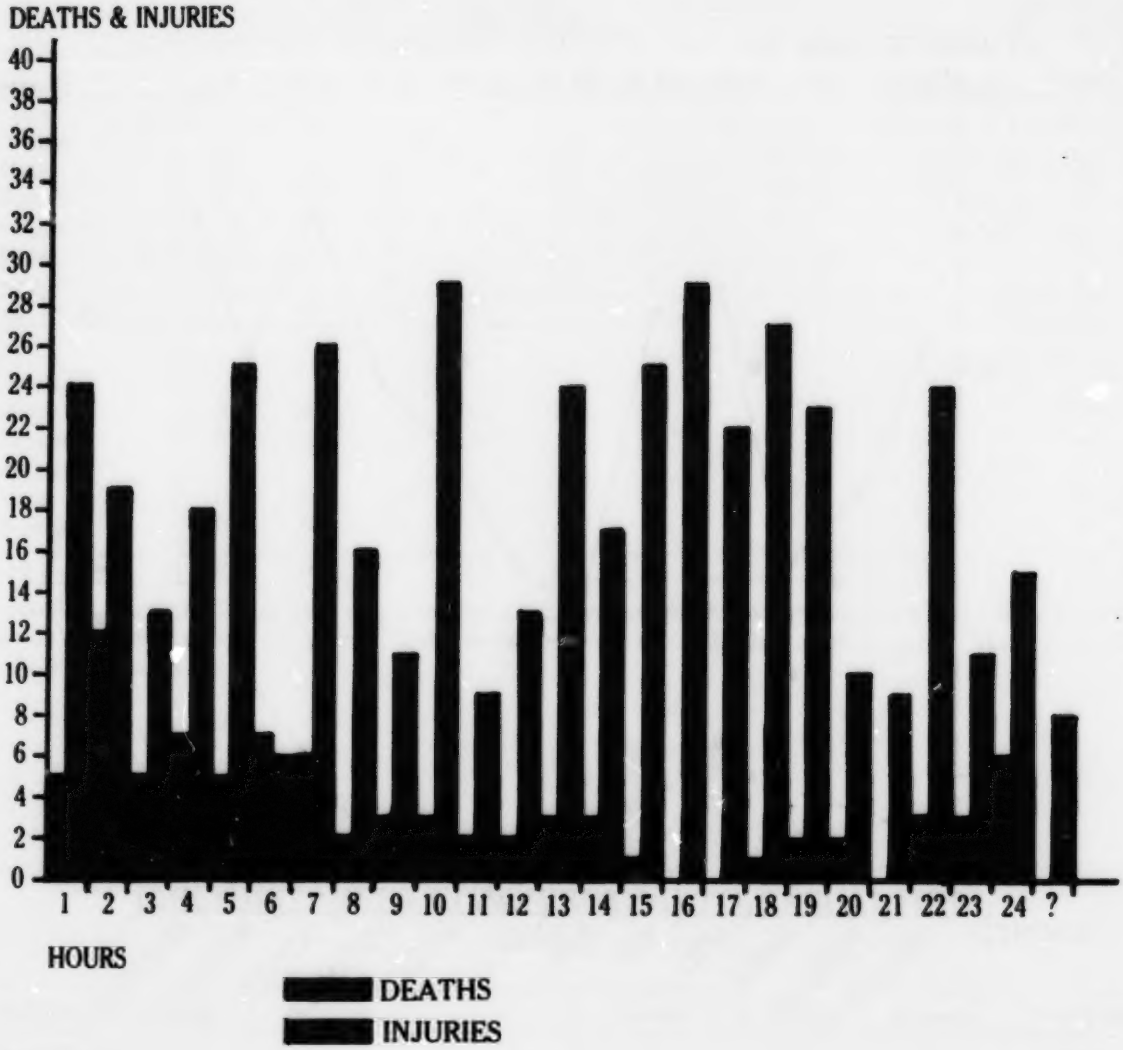
Commentary: Where the condition of the victim is known in a fatal fire, the victim was usually asleep or impaired by alcohol. While little information is known about the condition of the injured casualty, the most common known factor is that the victim was asleep.

CASUALTIES BY MONTH
1981



Commentary: Deaths were highest in November with 17, followed by April with 13.

CASUALTIES BY HOUR OF DAY
1981



Time Period	Deaths	% of Total	Injuries	% of Total
6:31 a.m. - 2:30 p.m.	24	38.9	145	32.0
2:31 p.m. - 10:30 p.m.	9	10.8	169	37.3
10:31 p.m. - 6:30 a.m.	50	60.2	131	28.0
Unknown	0	—	8	1.8
TOTAL	83	99.9	453	100.0

Commentary: While 60% of deaths occurred from 10:31 p.m. to 6:30 a.m. (assuming this is the time period when most people are sleeping), injuries were fairly evenly distributed throughout the day.

CASUALTIES BY MAJOR PROPERTY CLASSIFICATIONS 1981

Property Classification	Deaths	% of Total	Injuries	% of Total
ASSEMBLY				
Theatre, Studio, Auditorium	0	—	0	—
Amusement and Recreation Place	0	—	2	.4
School, College, University	0	—	2	.4
Church, Court Room, Funeral Parlour	0	—	0	—
Social, Sport Club	0	—	0	—
Library, Museum	0	—	0	—
Eating Establishment	0	—	6	1.3
Passenger Terminal, Station	0	—	0	—
Miscellaneous	0	—	3	.7
Sub-Total	0	—	13	2.9
INSTITUTIONAL				
Prison, Jail, Reformatory	0	—	0	—
Home for Aged	1	1.2	0	—
Children's Hospital	0	—	0	—
Hospital, Sanitorium, Clinic	0	—	2	.4
Miscellaneous	0	—	0	—
Sub-Total	1	1.2	2	.4
RESIDENTIAL				
One and Two Family Residence	42	50.6	155	34.2
Apartment	12	14.5	66	14.6
Rooming, Boarding House	0	—	1	.2
Hotel	0	—	3	.7
Motor Hotel	1	1.2	4	.9
Dormitory	1	1.2	1	.2
Mobile Home	11	13.3	29	6.4
Miscellaneous	0	—	0	—
Sub-Total	67	80.7	259	57.2
BUSINESS AND PERSONAL SERVICE				
Office	0	—	3	.7
Personal Service	0	—	0	—
Electronic Equipment	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	1	—	3	.7
MERCANTILE				
Food, Beverage Sale	0	—	0	—
Textile, Wearing Apparel Sale	0	—	0	—
Furniture, Appliance, Hardware Sale	0	—	12	2.6
Books, Newspapers, Drugs, Specialties	0	—	0	—
Recreation, Hobby Supplies	0	—	1	.2
Repair Shop, Laundry, Dry Cleaner	0	—	2	.4
Motor Vehicles, Boats, Sales and Service	0	—	13	2.9
Department, Variety Store	0	—	1	.2
Miscellaneous	0	—	1	.2
Sub-Total	0	—	30	6.6

CASUALTIES BY MAJOR PROPERTY CLASSIFICATIONS 1981 (Cont.)

Property Classification	Deaths	% of Total	Injuries	% of Total
INDUSTRIAL MANUFACTURING PROPERTIES				
Chemicals, Petroleum, Paints, Plastics	0	—	9	2.0
Wood, Furniture, Paper, Printing	0	—	6	1.3
Metal, Metal Products, Electrical Appliances	0	—	4	.9
Food Processing	0	—	3	.7
Beverages, Tobacco, Soap, Margarine	0	—	0	—
Textiles	0	—	0	—
Footwear, Wearing Apparel	0	—	0	—
Vehicles and Related Equipment	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	0	—	22	4.9
INDUSTRIAL STORAGE PROPERTIES				
Agricultural Products	0	—	1	.2
Textiles, Fibres, Clothing	0	—	0	—
Processed Food, Beverages	0	—	0	—
Flammable Liquids, Gases, Petroleum	1	1.2	1	.2
Wood, Furniture, Paper and Products	0	—	0	—
Chemicals, Plastics, Paints	0	—	1	.2
Metal Goods, Machinery, Electrical Appliances	0	—	0	—
Vehicles	1	1.2	17	3.8
Miscellaneous	0	—	15	3.3
Sub-Total	2	2.4	35	7.7
SPECIAL PROPERTY — TRANSPORTATION EQUIPMENT				
Outdoor Property	1	1.2	11	2.4
Pier, Wharf	0	—	0	—
Under Construction/Demolition: Vacant	0	—	15	3.3
Watercraft	0	—	1	.2
Rail Transport Vehicle and Equipment	0	—	0	—
Ground Transport Vehicle	8	9.6	34	7.5
Aircraft	0	—	0	—
Special Vehicle	0	—	7	1.5
Miscellaneous	0	—	0	—
Sub-Total	9	10.8	68	15.0
MISCELLANEOUS PROPERTIES				
Laboratories	0	—	0	—
Farm Facilities	0	—	5	1.1
Miscellaneous Outbuildings	1	1.2	2	.4
Utility	1	1.2	14	3.1
Cement, Glass, Pottery Manufacturing	0	—	0	—
Mining, Quarrying	2	2.4	0	—
Communications	0	—	0	—
Nucleonics	0	—	0	—
Miscellaneous	0	—	0	—
Sub-Total	4	4.8	21	4.6
TOTAL	83	99.9	453	100.0

Commentary: Over 80% of fire-related deaths occurred in residential properties, while 57% of injuries occurred in this property classification. Another 10% of fire-related deaths and 8% of injuries occurred in vehicles.

CASUALTIES BY ACT OR OMISSION 1980

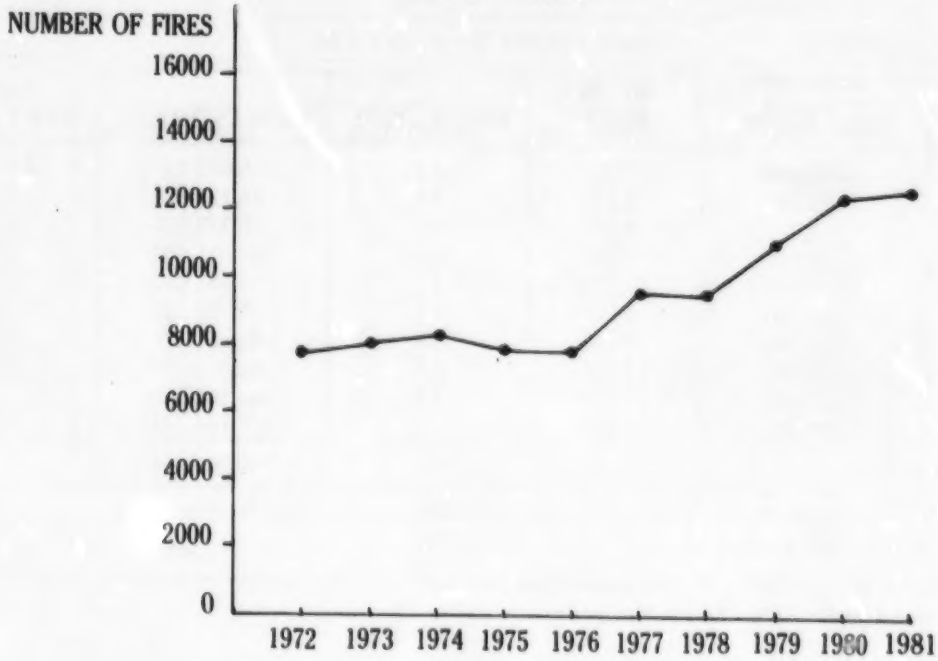
Property Classification	Deaths	% of Total	Injuries	% of Total
INCENDIARY				
Arson, Charges Laid	0	—	18	4.0
Suspected Arson, No Charges Laid	1	1.2	20	4.4
Mischief, Vandalism, Charges Laid	0	—	2	.4
Mischief, Vandalism, No Charges Laid	0	—	6	1.3
Incendiary, Unclassified	0	—	0	—
Sub-Total	1	1.2	46	10.2
MISUSE OF SOURCE OF IGNITION				
Disposal of Smoker's Material	24	28.9	57	12.6
Thawing	0	—	0	—
Inadequate Control of Open Fire	2	2.4	3	.7
Child Playing with	4	4.8	21	4.6
Welding or Cutting Too Close to	0	—	11	2.4
Torch Too Close to	0	—	5	1.1
Misuse of Source of Ignition, Unclassified	0	—	2	.4
Sub-Total	30	36.1	99	21.9
MISUSE OF MATERIAL IGNITED				
Fuel Spilled	1	1.2	17	3.8
Improper Fueling Technique	0	—	9	2.0
Flammable Liquid to Kindle Fire	4	4.8	6	1.3
Cleaning Parts	1	1.2	10	2.2
Improper Container (plastic)	0	—	1	.2
Combustible Placed Too Close to Heat	2	2.4	17	3.8
Improper Storage	0	—	6	1.3
Misuse of Material Ignited, Unclassified	1	1.2	6	1.3
Sub-Total	9	10.8	72	15.9
MECHANICAL & ELECTRICAL FAILURE, MALFUNCTION				
Part Failure, Leak, Break	2	2.4	24	5.3
Automatic Control Failure	0	—	3	.7
Electrical Short Circuit	6	7.2	28	6.2
Mechanical & Electrical Failure, Unclassified	3	3.6	17	3.8
Sub-Total	11	13.3	72	15.9
CONSTRUCTION, DESIGN OR INSTALLATION DEFICIENCY				
Design Deficiency	0	—	2	.4
Construction Deficiency	0	—	1	.4
Installed Too Close to Combustible	2	2.4	1	.2
Other Installation Deficiency	0	—	3	.7
Sub-Total	2	2.4	7	1.5
MISUSE OF EQUIPMENT				
Misuse of Equipment, Unclassified	0	—	5	1.1
HUMAN FAILING				
Asleep	2	2.4	9	2.0
Temporary Loss of Judgement	2	2.4	22	4.9
Accident (Personal)	1	1.2	11	2.4
Influence of Alcohol	2	2.4	13	2.9
Influence of Drugs	1	1.2	0	—
Human Failing, Unclassified	4	4.8	59	13.0
Sub-Total	12	14.5	114	25.2
VEHICLE ACCIDENT				
Automobile	4	4.8	3	.7
Vechicle Accident, Unclassified	0	—	1	.2
Sub-Total	4	4.8	4	.9
MISCELLANEOUS				
Miscellaneous, Unclassified	14	16.9	34	7.5
TOTAL	83	100.0	453	100.1

Commentary: Improper disposal of smokers' material was the leading cause of fatal fires resulting in injuries.

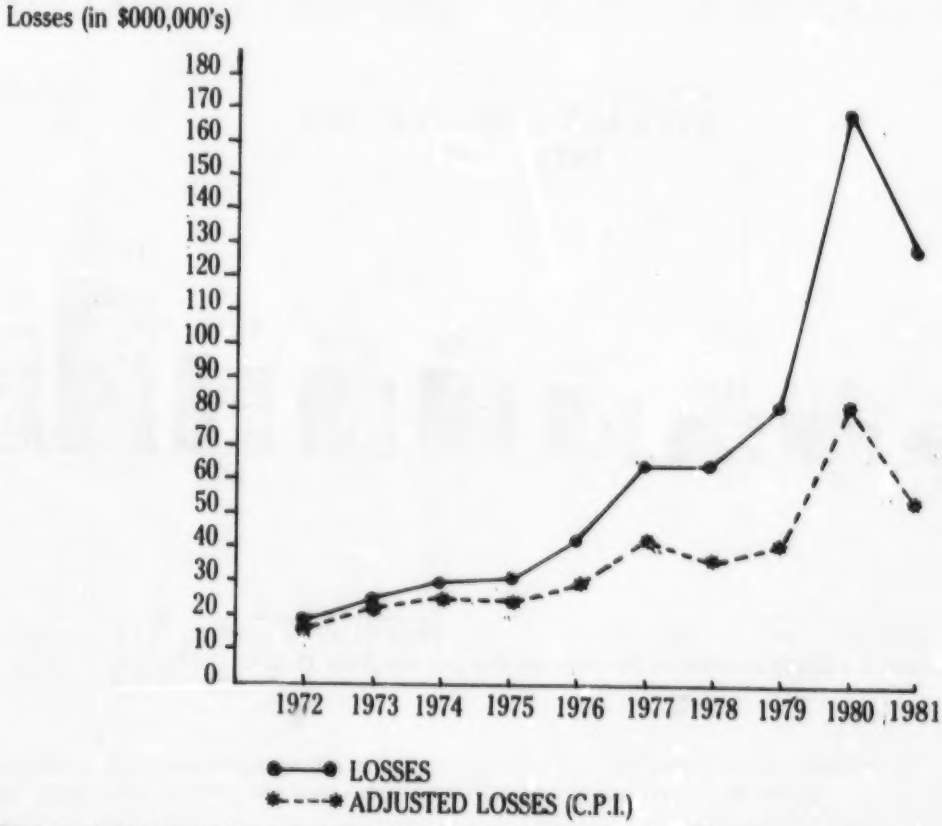
SECTION TWO

ALBERTA FIRE LOSS INFORMATION

FIRES AND LOSSES
1972 - 1981



Commentary: The number of fires has increased 62% from 1972 to 1981.



Commentary: Losses have increased 614% between 1972 and 1981 and adjusted losses have increased 216%.

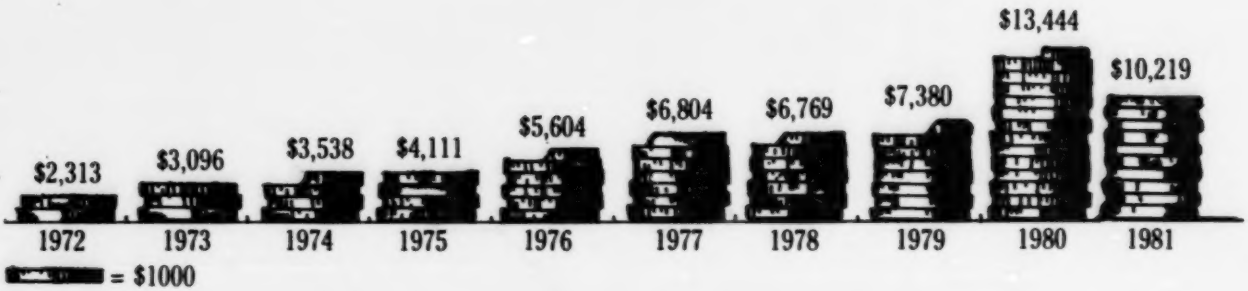
FIRE RATES AND PER CAPITA LOSSES
1971 — 1980

YEAR	POPULATION*	NO. OF FIRES	FIRE RATE**	LOSS ESTIMATE	LOSS PER CAPITA
1972	1,655,000	7,817	4.7	$18,079,437	$10.92
1973	1,683,000	8,115	4.8	25,121,878	14.93
1974	1,714,000	8,586	5.0	30,379,607	17.72
1975	1,789,000	7,934	4.4	32,617,954	18.23
1976	1,868,000	7,773	4.2	43,562,105	23.32
1977	1,900,000	9,607	5.1	65,366,342	34.40
1978	1,999,000	9,684	4.8	65,551,371	32.79
1979	2,064,000	11,158	5.4	82,348,703	39.90
1980	2,146,000	12,531	5.8	168,460,950	78.50
1981	2,278,000	12,640	5.5	129,164,293	56.71
Average (1972-1981)		39,584		$66,065,264	

*As published by Alberta Quarterly Growth, 4th Quarterly, Alberta Bureau of Statistics
**Number of fires per 1,000 population

Commentary: From 1972 to 1981, Alberta's population increased 38%, the number of fires increased 62%, the fire rate 17%, the loss estimate 614% and the loss per capita 419%.

AVERAGE LOSS PER FIRE
1972 - 1981



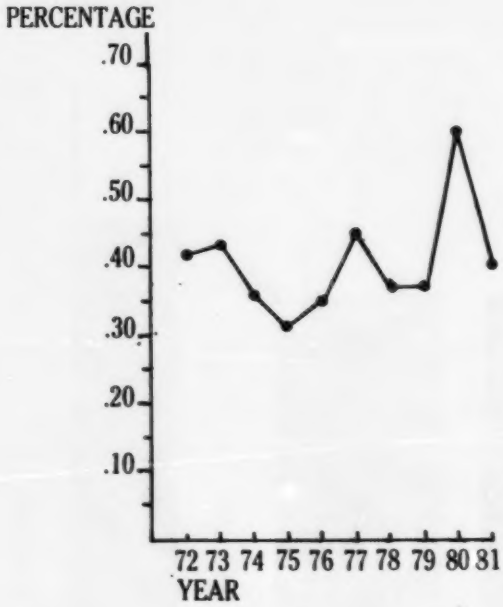
Commentary: There is a 342% increase in the average loss per fire from 1972 to 1981.

FIRE LOSSES RELATED TO ECONOMIC INDICES
1971 — 1980

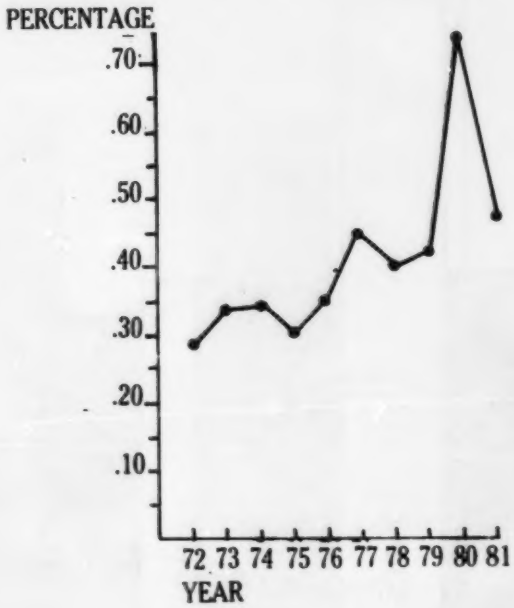
		NET VALUE OF PRODUCTION		PERSONAL INCOME	
Year	Fire Losses (in $000,000's)	Net Value of Production* (in $000,000's)	% of Net Value of Production	Personal Income** (in $000,000's)	% of Personal Income
1972	$ 18.1	$ 4,352	.42	$ 6,276	.29
1973	25.1	5,877	.43	7,474	.34
1974	30.4	8,380	.36	9,030	.34
1975	32.6	10,470	.31	11,015	.30
1976	43.6	12,446	.35	12,810	.34
1977	65.4	14,555	.45	14,545	.45
1978	65.6	17,705	.37	16,483	.40
1979	82.3	22,483	.37	19,493	.42
1980	168.5	28,000	.60	22,655	.74
1981	129.2	31,321	.40	27,630	.47

*Alberta Bureau of Statistics preliminary estimates based on available statistics, 1981.
**Alberta Ecomonic Accounts, 1981.

FIRE LOSSES AS A PERCENTAGE OF NET VALUE OF PRODUCTION

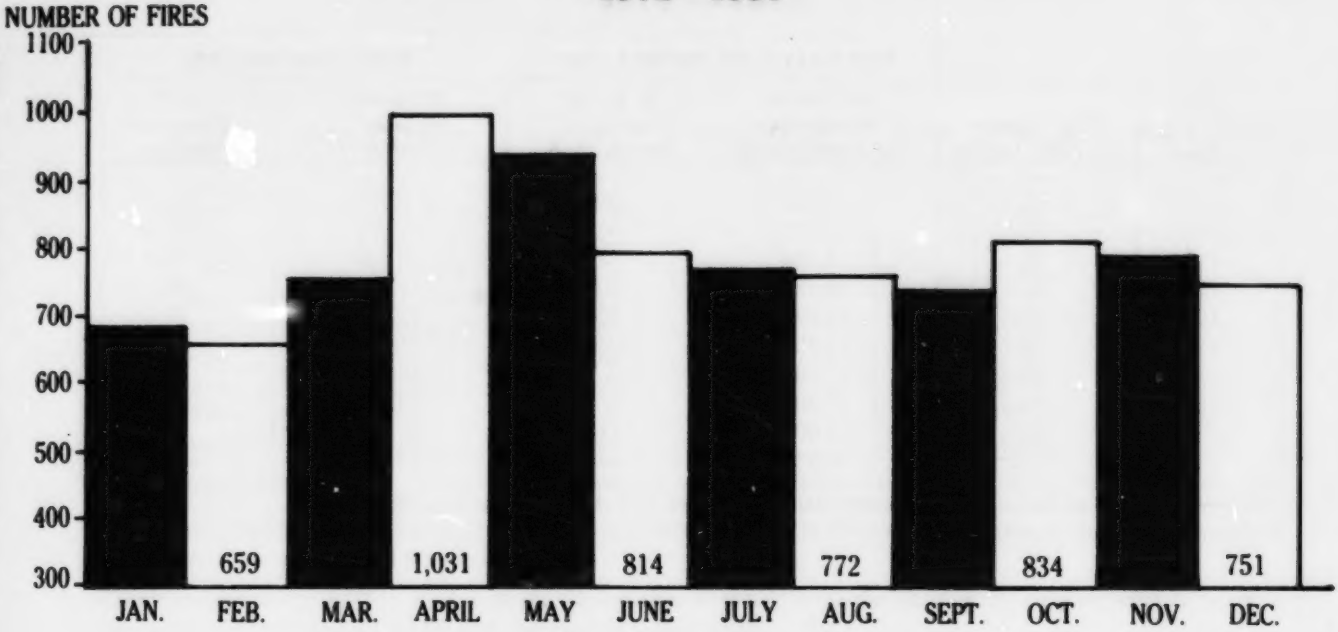


FIRE LOSSES AS A PERCENTAGE OF PERSONAL INCOME

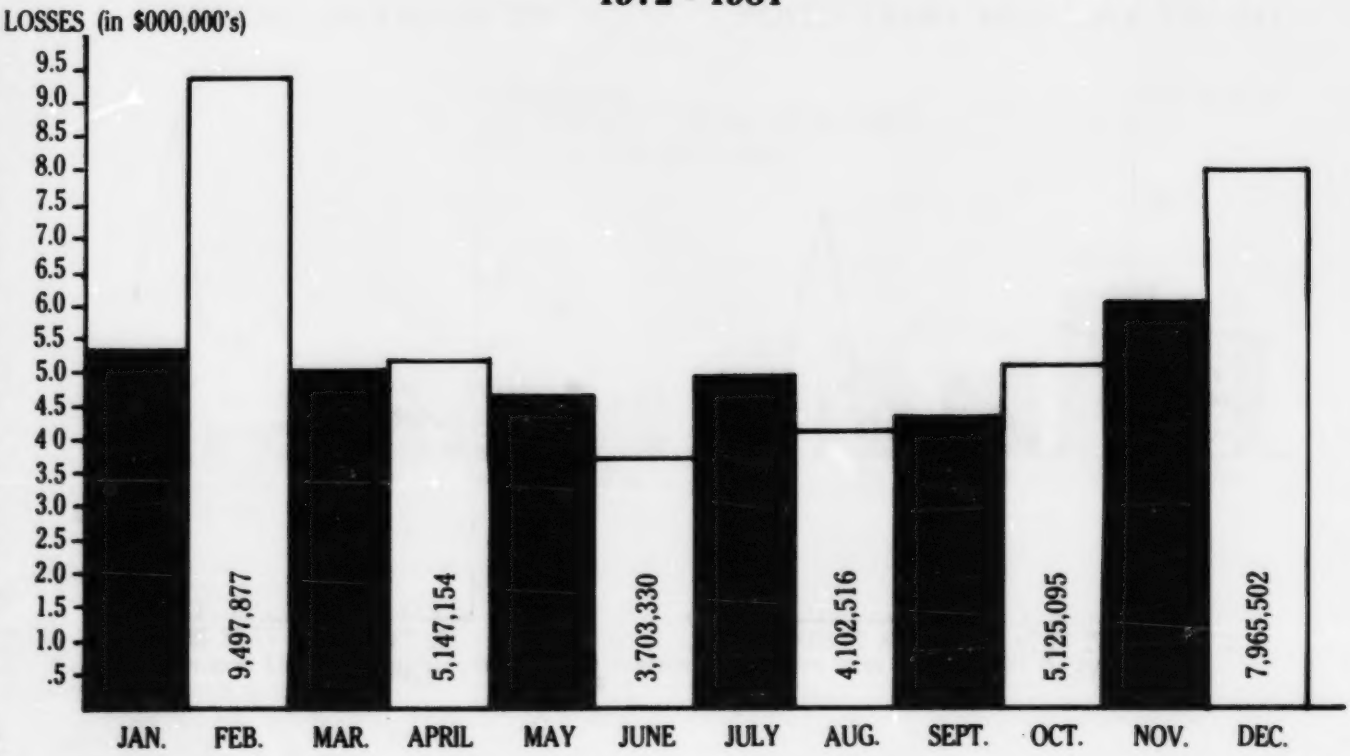


Commentary: As a percentage of the net value of production, fire losses are the same in 1972 and 1981. As a percentage of personal income, fire losses increased 62% during the same time period.

AVERAGE NUMBER OF FIRES BY MONTH
1972 - 1981

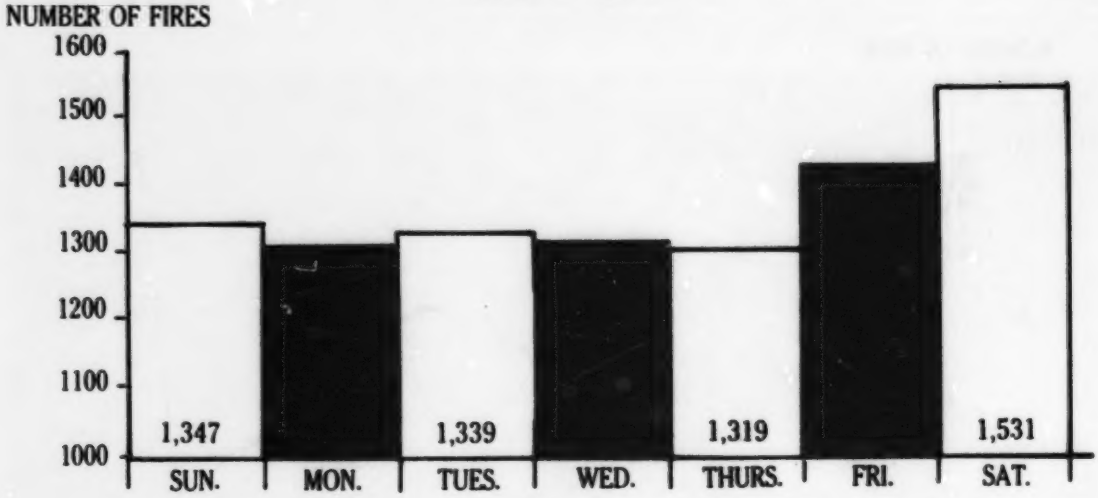


AVERAGE FIRE LOSS BY MONTH
1972 - 1981

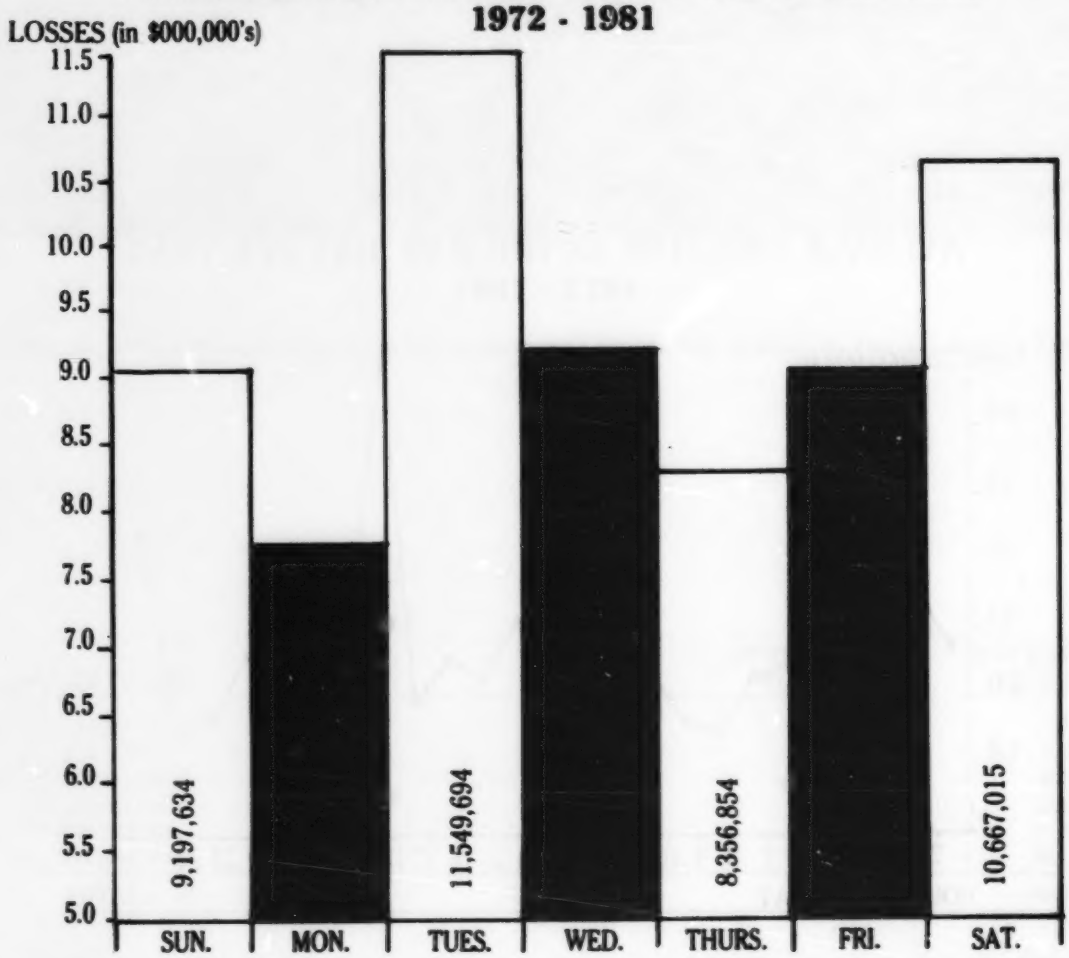


Commentary: While the average number of fires was greatest in the months of April and May, average losses were highest in February and December. The highest average loss per fire per month ($14,413) was in February.

AVERAGE NUMBER OF FIRES BY DAY OF WEEK PER YEAR
1972 - 1981

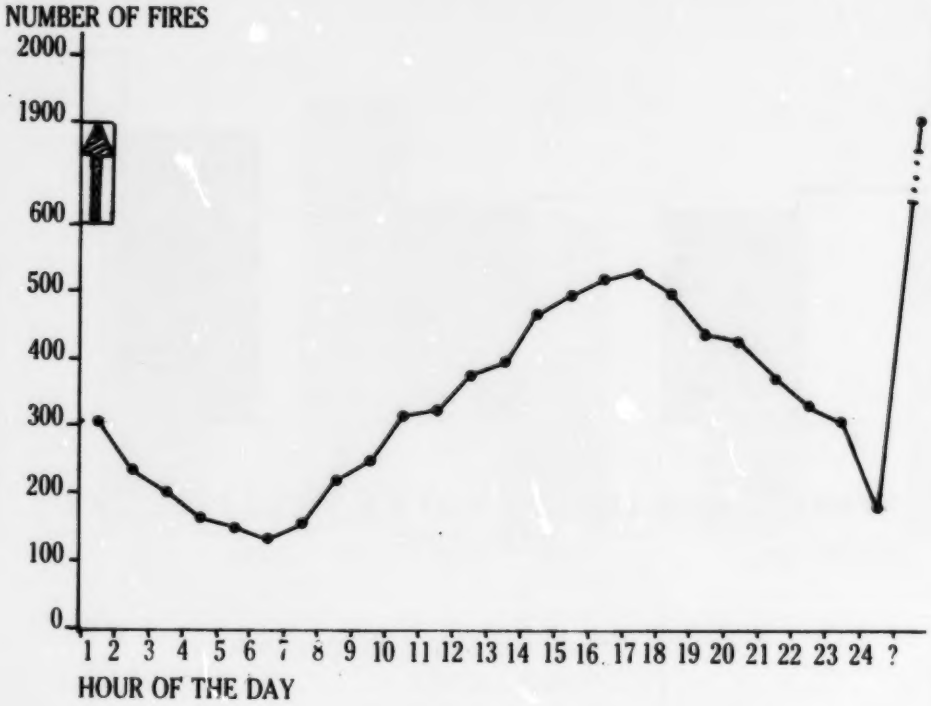


AVERAGE FIRE LOSS BY DAY OF WEEK PER YEAR
1972 - 1981

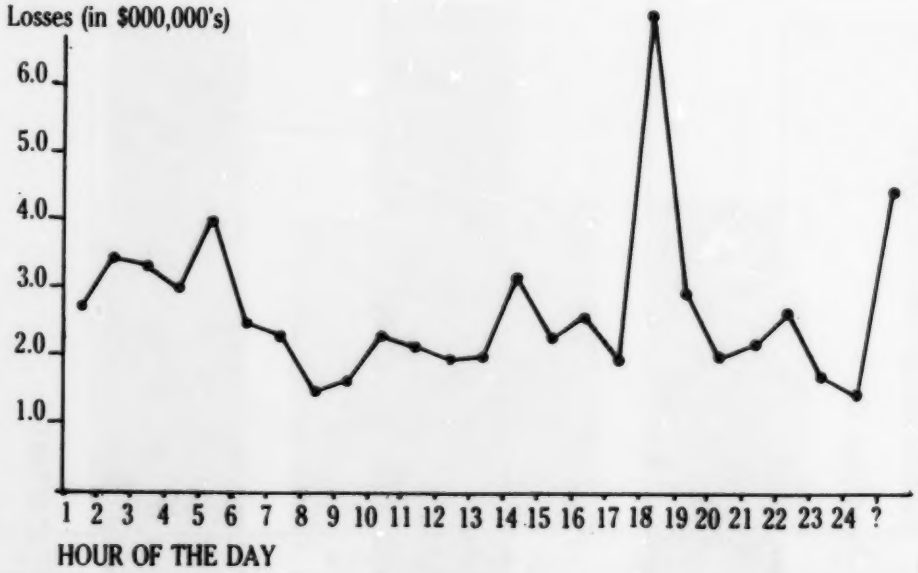


Commentary: From 1972 to 1981, the highest average number of fires on any day of the week occurred on Saturday. Tuesday and Saturday had higher losses than other days, with Monday having the lowest losses.

AVERAGE NUMBER OF FIRES BY HOUR OF DAY PER YEAR
1972 - 1981

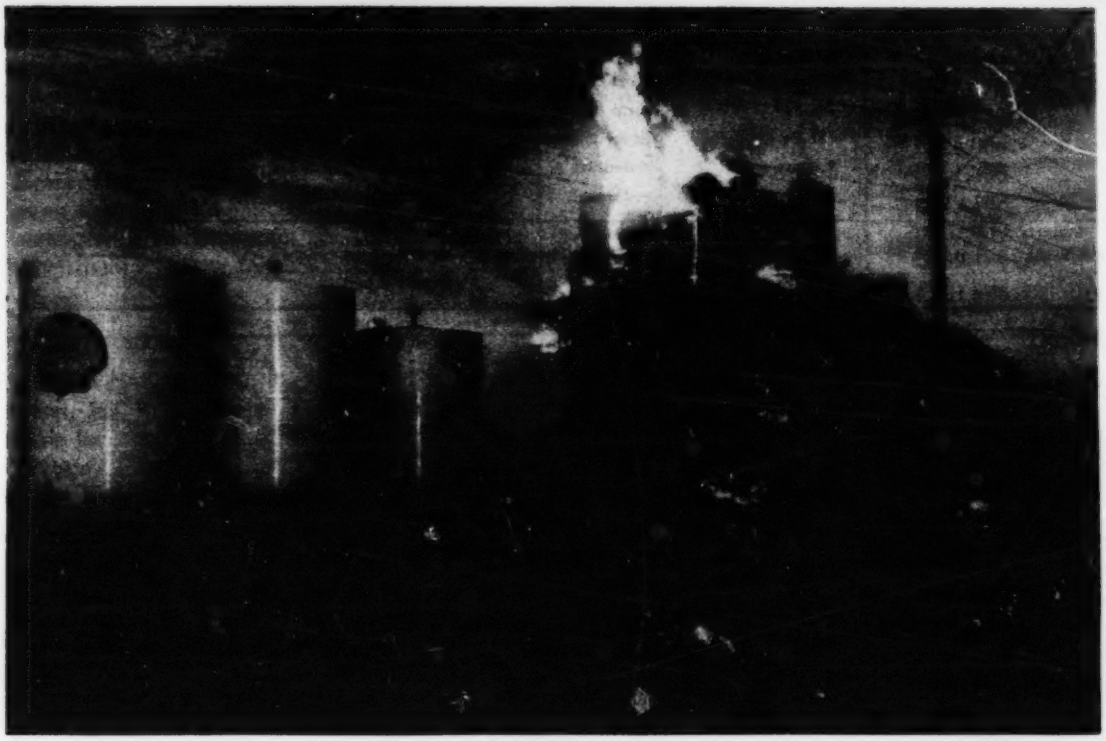


AVERAGE FIRE LOSS BY HOUR OF DAY PER YEAR
1972 - 1981



Commentary: While the greatest number of fires occurred between the hours of 1400 (2:00 p.m.) and 2000 (8:00 p.m.), the greatest losses generally occurred during the early morning hours. The greatest average loss was sustained at 1800 (6:00 p.m.), but this high average is a reflection of a $35,000,000 fire which occurred at that hour in 1980.

FIRES BY LOSS CATEGORY — 1981



On October 27, 1981 a Veteran Alberta grain elevator was completely destroyed. The loss was $1,736,039.

LOSS CATEGORY	NUMBER	LOSSES	PERCENTAGE NUMBER	PERCENTAGE LOSSES
$1-99	4,070	61,717	32.2	.1
100-999	3,557	1,373,720	28.1	1.1
1,000-9,999	3,507	11,188,749	27.7	8.7
10,000-49,999	1,099	23,961,961	8.7	18.6
50,000-249,999	330	30,399,853	2.6	23.5
250,000 and over	77	62,178,293	.6	48.1
TOTAL	12,640	129,164,293	99.9	100.1

Commentary: Just over one-half of one per cent of the fires caused 48.1% of the 1981 losses.

1981 LARGE LOSS FIRES ($500,000 and over)

PROPERTY CLASS	DATE	LOCATION	OCCUPANCY	ACT OR OMISSION	LOSSES	DEATH	INJURIES
ASSEMBLY	Feb. 10	Banff	bus terminal	mechanical, electrical failure	853,500		
	Apr. 30	Calgary	miscellaneous	smokers' material	1,839,190		3
	May 3	Edmonton	night club	suspected incendiarism	621,067		
	June 27	Innisfail	night club	miscellaneous	859,286		
	July 19	I.D. 24	junior high school	suspected incendiarism	5,000,000		
	Sept. 15	Calgary	restaurant	suspected incendiarism	511,326		
	Nov. 1	Edmonton	restaurant	suspected incendiarism	1,004,593		
RESIDENTIAL	Sept. 17	Edmonton	one family dwelling	miscellaneous	1,123,200	1	3
	Dec. 25	High Prairie	hotel	worn out part	500,000		
MERCANTILE	Jan. 1	Ft. McMurray	motor vehicle repair shop	incendiarism	1,156,610		1
	Mar. 15	Leduc	sporting goods shop	miscellaneous	698,148		
	Mar. 28	Calgary	Large variety store	suspected incendiarism	1,510,756		
	Nov. 2	Calgary	supermarket	combustible too close to heat	622,188		
	Dec. 5	Calgary	furniture store	human failing	521,807		
INDUSTRIAL MANUFACTURING	Jan. 21	I.D. 18	sawmill	worn out part	625,000		
	Mar. 23	Cty. 31	sawmill	electrical short circuit	628,291		
	May 27	Ft. Saskatchewan	industrial chemical plant	miscellaneous	7,000,000		5
	Aug. 18	Cty. 1	wood product manufacturing	miscellaneous	885,000		1
	Aug. 18	Cty. 1	wood, furniture, paper, printing manufacturing	inadequate control of open fire	635,000		
	Sept. 1	St. Paul	grain mill	miscellaneous	900,474		
	Sept. 11	Cty. 4	petroleum refinery	welding too close to	4,000,000		
	Nov. 17	Grande Prairie	newspaper printing	incendiarism	752,100		
INDUSTRIAL STORAGE	Mar. 11	Calgary	general warehouse	welding	710,603		
	Apr. 20	Wetaskiwin	general warehouse	miscellaneous	1,549,683		
	July 25	Lethbridge	furniture storage	miscellaneous	1,093,965		
	July 31	M.D. 90	wearing apparel storage	suspected incendiarism	5,011,285		
	Aug. 5	Fairview	bulk grain storage	suspected incendiarism	715,000		
	Oct. 27	Veteran	bulk grain storage	electrical short circuit	1,736,039		1
	Dec. 9	Cty. 17	bulk grain storage	mechanical, electrical failure	801,620		
SPECIAL	Oct. 15	High Prairie	building under construction	miscellaneous	749,225		
MISCELLANEOUS	Jan. 8	Cty. 14	cow and cattle production	electrical short circuit	576,589		
	Oct. 15	I.D. 18	heating plant	installation deficiency	800,000		
	Oct. 30	Cty. 20	gas distribution system	part failure	968,000		1

FIRES BY MAJOR PROPERTY CLASSIFICATIONS 1981

Property Classification	Number of Fires	% of Total	Losses	% of Total
ASSEMBLY				
Theatre, Studio, Auditorium	8	.1	17,228	0
Amusement and Recreation Place	47	.4	640,860	.5
School, College, University	50	.4	6,347,278	4.9
Church, Court Room, Funeral Parlour	9	.1	122,770	.1
Social, Sport Club	21	.2	328,008	.3
Library, Museum	1	0	1,355	0
Eating Establishment	77	.6	4,773,108	3.7
Passenger Terminal, Station	9	.1	862,099	.7
Miscellaneous	1	0	1,839,190	1.4
Sub-Total	223	1.8	14,931,896	11.6
INSTITUTIONAL				
Prison, Jail, Reformatory	6	0	53,032	0
Home for Aged	20	.2	35,417	0
Children's Hospital	1	0	100	0
Hospital, Sanitorium, Clinic	47	.4	53,540	0
Miscellaneous	0	—	—	—
Sub-Total	7	.6	142,089	.1
RESIDENTIAL				
Residence	2,281	18.0	20,590,175	15.9
Apartment	833	6.6	4,697,665	3.6
Rooming, Boarding House	11	.1	6,324	0
Hotel	76	.6	1,333,316	1.0
Motor Hotel	42	.3	771,584	.6
Dormitory	22	.2	485,732	.4
Mobile Home	360	2.8	3,280,786	2.5
Miscellaneous	10	.1	7,641	0
Sub-Total	3,635	28.8	31,173,223	24.1
BUSINESS AND PERSONAL SERVICE				
Office	72	.6	936,123	.7
Personal Service	4	0	9,371	0
Electronic Equipment	0	—	—	—
Miscellaneous	0	—	—	—
Sub-Total	76	.6	945,494	.7
MERCANTILE				
Food, Beverage Sale	41	.3	1,721,430	1.3
Textile, Wearing Apparel Sale	7	0	4,085	0
Furniture, Appliance, Hardware Sale	16	.1	1,787,601	1.4
Books, Newspapers, Drugs, Specialties	12	.1	79,742	.1
Recreation, Hobby Supplies	9	.1	717,610	.6
Repair Shop, Laundry, Dry Cleaner	23	.2	584,175	.5
Motor Vehicles, Boats, Sales and Service	96	.8	3,477,761	2.7
Department, Variety Store	17	.1	1,715,368	1.3
Miscellaneous	13	.1	139,647	.1
Sub-Total	234	1.8	10,227,419	7.9

FIRES BY MAJOR PROPERTY CLASSIFICATIONS 1981 (cont.)

Property Classification	Number of Fires	% of Total	Losses	% of Total
INDUSTRIAL MANUFACTURING PROPERTIES				
Chemicals, Petroleum, Paints, Plastics	35	.3	11,641,956	9.0
Wood, Furniture, Paper Printing	45	.4	4,923,860	3.8
Electrical Appliances	45	.4	1,707,897	1.3
Food Processing	31	.2	1,645,679	1.3
Beverages, Tobacco, Soap, Margarine	1	0	35,000	0
Textiles	1	0	25,999	0
Footwear, Wearing Apparel	10	.1	150,315	.1
Vehicles and Related Equipment	3	0	208,025	.2
Miscellaneous	13	.1	275,778	.2
Sub-Total	184	1.5	20,614,509	16.0
INDUSTRIAL STORAGE PROPERTIES				
Agricultural Products	116	.9	4,996,589	3.9
Textiles, Fibres, Clothing	8	.1	5,011,292	3.9
Processed Food, Beverages	6	0	114,221	.1
Flammable Liquids, Gases, Petroleum	29	.2	494,528	.4
Wood, Furniture, Paper and Products	25	.2	1,493,786	1.2
Chemicals, Plastics, Paints	3	0	657,492	.5
Metal Goods, Machinery, Electrical Appliances	14	.1	456,624	.4
Vehicles	337	2.7	2,349,011	1.8
Miscellaneous	59	.5	4,289,315	3.3
Sub-Total	597	4.7	19,862,858	15.4
SPECIAL PROPERTY				
Outdoor Property	2,727	21.6	222,551	.2
Pier, Wharf	7	.1	569,302	.4
Under Construction/Demolition: Vacant	270	2.1	3,962,735	3.1
Watercraft	15	.1	46,602	0
Rail Transport Vehicle and Equipment	32	.3	214,981	.2
Ground Transport Vehicle	3,495	27.7	10,786,969	8.4
Aircraft	4	0	22,051	0
Special Vehicle	348	2.8	5,951,392	4.6
Miscellaneous	9	.1	14,485	0
Sub-Total	6,907	54.6	21,791,068	16.9
MISCELLANEOUS PROPERTIES				
Laboratories	11	.1	279,526	.2
Farm Facilities	293	2.3	3,081,895	2.4
Miscellaneous Outbuildings	248	2.0	656,501	.5
Utility	123	1.0	3,652,345	2.8
Cement, Glass, Pottery Manufacturing	10	.1	626,718	.5
Mining, Quarrying	22	.2	1,178,352	.9
Communications	3	0	400	0
Nucleonics	0	—	—	—
Miscellaneous	0	—	—	—
Sub-Total	710	5.6	9,475,737	7.3
TOTAL	12,640	100.0	129,164,293	100.0

Commentary: While the number of fires was greatest in the "special" classification (notably outdoor property and vehicles) with 55%, losses were greatest in residential properties with 24%.

PROPERTY LOSSES RELATED TO AREA OF ORIGIN 1981

Property Classification	MEANS OF EGRESS		ASSEMBLY AREA		FUNCTION AREA		STORAGE AREA	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	16	$5,024,524	23	$1,280,447	98	$ 5,690,305	18	$ 187,886
Institutional	3	7	5	1,151	51	110,294	1	1
Residential	114	1,213,070	509	5,644,707	2,051	14,352,089	153	2,316,022
Business	6	1,749	3	169,617	30	573,010	8	40,391
Mercantile	6	1,560,375	17	541,764	49	924,983	40	3,022,647
Manufacturing	2	251,413	0	—	40	8,699,461	21	2,271,959
Storage	5	445,844	2	65,500	14	116,288	307	10,294,733
Special	11	28,515	11	48,170	73	1,030,460	24	538,909
Miscellaneous	2	20,800	5	112	27	1,167,580	140	1,858,225
TOTAL	165	$8,546,297	575	$7,751,468	2,433	$32,664,420	712	$20,530,773

Property Classification	SERVICE FACILITIES		SERVICE AND EQUIPMENT AREA		STRUCTURAL AREA		VEHICLE AREA	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	5	$ 3,400	14	$ 319,593	38	$ 2,419,506	0	—
Institutional	2	126	8	26,335	4	4,175	0	—
Residential	79	323,273	246	2,378,599	400	4,613,167	35	$ 227,305
Business	2	2,000	12	113,921	14	44,805	0	—
Mercantile	5	44,879	54	2,503,800	38	1,476,135	1	1
Manufacturing	9	4,030,255	64	3,532,035	25	1,523,291	0	—
Storage	7	2,724,967	26	1,213,561	156	3,593,311	1	3,000
Special	0	—	14	275,104	128	2,258,815	3,861	16,681,779
Miscellaneous	8	480,599	61	4,217,853	211	1,235,527	0	—
TOTAL	117	$7,609,499	499	$14,580,801	1,014	$17,168,732	3,898	$16,912,085

Property Classification	OUTSIDE AREA		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses
Assembly	11	$6,235	223	$ 14,931,896
Institutional	—	—	74	142,089
Residential	48	104,991	3,635	31,173,223
Business	1	1	76	945,494
Mercantile	24	152,835	234	10,227,419
Manufacturing	23	306,095	184	20,614,509
Storage	79	1,405,654	597	19,862,858
Special	2,785	929,316	6,907	21,791,068
Miscellaneous	256	495,091	710	9,475,737
TOTAL	3,227	$3,400,218	12,640	$129,164,293

Commentary: For all types of occupancies, fires starting in service facilities (heating and cooking ducts, chimneys, chutes) caused an average $65,038 loss. The next highest average loss, $51,796 occurred when fires started in a means of egress.

PROPERTY LOSSES RELATED TO ACT OR OMISSION 1981

Property Classification	INCENDIARY FIRES		MISUSE OF SOURCE		MISUSE OF MATERIAL		MECHANICAL, ELECTRICAL FAILURE	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	72	$ 9,591,571	43	$ 1,942,385	11	$ 139,998	47	$ 1,177,782
Institutional	12	64,000	24	7,182	3	9,033	16	21,933
Residential	220	3,943,292	968	8,367,502	192	1,889,794	712	5,592,118
Business	12	313,759	20	51,852	5	104,677	24	181,038
Mercantile	44	4,379,860	48	842,085	22	1,274,397	66	1,364,802
Manufacturing	16	1,603,597	35	5,054,774	19	690,880	58	3,112,797
Storage	101	7,564,331	227	2,227,794	54	904,101	77	4,152,928
Special	630	3,141,716	1,832	2,720,316	129	474,961	2,309	8,948,881
Miscellaneous	64	796,029	277	1,176,226	24	236,608	100	3,797,870
TOTAL	1,171	$31,398,155	3,474	$22,390,116	459	$5,724,449	3,409	$28,350,149

Property Classification	DESIGN DEFICIENCY		MISUSE OF EQUIPMENT		HUMAN FAILINGS		VEHICLE ACCIDENT	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	8	$ 13,201	2	$ 301	17	$ 482,135	0	—
Institutional	2	3,700	1	12	14	3,229	0	—
Residential	106	1,221,693	10	52,057	1,067	3,749,812	1	$ 10,000
Business	1	2,000	0	—	7	29,321	0	—
Mercantile	2	37,500	1	2,500	19	720,463	4	2,103
Manufacturing	4	22,550	3	2,190	16	126,912	0	—
Storage	10	179,233	3	69,909	25	635,185	1	1,000
Special	18	56,614	14	46,844	232	347,193	119	1,053,337
Miscellaneous	10	944,501	3	29,760	21	115,877	5	6,100
TOTAL	161	$2,480,992	37	$203,573	1,418	$6,210,127	130	$1,072,540

Property Classification	MISCELLANEOUS		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses
Assembly	23	$ 1,584,523	223	$ 14,931,896
Institutional	2	33,000	74	142,089
Residential	359	6,346,955	3,635	31,173,223
Business	7	262,847	76	945,494
Mercantile	28	1,603,709	234	10,227,419
Manufacturing	33	10,000,809	184	20,614,509
Storage	99	4,128,377	597	19,862,858
Special	1,624	5,001,206	6,907	21,791,068
Miscellaneous	206	2,372,766	710	9,475,737
TOTAL	2,381	$31,334,192	12,640	$129,164,293

Commentary: Misuse of source of ignition caused 27% of all fires but only 17% of the losses. Mechanical, eletrical failures also caused 27% of all fires and 22% of all property losses. The average loss in an incendiary fire was $26,813 compared to the general fire loss average of $10,219.

PROPERTY LOSSES RELATED TO SOURCE OF IGNITION 1981

Property Classification	HEATING EQUIPMENT		COOKING EQUIPMENT		SMOKERS' MATERIAL		ELECTRICAL DISTRIBUTION EQUIPMENT	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	9	$ 86,617	42	$ 368,158	18	$1,871,803	14	$ 966,635
Institutional	4	26,732	14	173	22	4,856	7	5,628
Residential	385	4,084,496	1,062	3,714,423	614	4,138,639	190	1,867,200
Business	11	356,437	7	36,375	11	34,896	6	63,131
Mercantile	29	1,473,759	10	13,949	16	195,432	28	1,111,746
Manufacturing	8	329,300	3	5,011	4	2,302	13	1,171,326
Storage	51	1,020,333	10	54,632	24	207,574	37	1,009,619
Special	48	527,708	25	50,893	559	311,679	983	3,329,348
Miscellaneous	28	1,642,704	2	1,201	33	406,994	62	820,837
TOTAL	573	$9,548,086	1,175	$4,244,820	1,301	$7,174,175	1,340	$10,345,470

Property Classification	ELECTRICAL APPLIANCES		OTHER APPLIANCES		"OPEN" FLAME		EXPOSURE	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	9	$ 49,393	10	$ 68,901	66	$ 2,322,853	7	$ 22,789
Institutional	4	1,202	3	1,101	17	66,397	0	—
Residential	226	1,687,190	160	480,919	466	4,812,835	116	1,442,303
Business	11	8,436	1	1,500	11	11,603	5	6,506
Mercantile	21	461,641	15	139,497	41	2,495,874	16	260,991
Manufacturing	18	1,109,037	14	230,929	42	5,537,585	8	728,003
Storage	21	1,817,891	14	40,714	132	1,838,644	141	1,272,770
Special	38	130,606	379	5,716,283	456	2,096,445	422	1,362,034
Miscellaneous	25	1,590,277	20	598,122	151	830,551	172	596,498
TOTAL	373	$6,855,673	616	$7,277,966	2,382	$20,012,787	887	$5,691,894

Property Classification	MISCELLANEOUS		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses
Assembly	48	$ 9,174,747	223	$ 14,931,896
Institutional	3	36,000	74	142,089
Residential	416	8,945,218	3,635	31,173,223
Business	13	426,610	76	945,494
Mercantile	58	4,074,530	234	10,227,419
Manufacturing	74	11,501,016	184	20,614,509
Storage	167	12,600,681	597	19,862,858
Special	1,997	8,266,067	6,907	21,791,068
Miscellaneous	217	2,988,553	710	9,475,737
TOTAL	2,993	$58,013,422	12,640	$129,164,293

Commentary: Where a source of ignition was identified, the highest average loss of $18,380 was in fires where the source was an open flame such as a match or welding torch. The next highest average loss, $16,663, was in fires where heating equipment was the source of ignition.

PROPERTY LOSSES RELATED TO FUEL OR ENERGY 1981

Property Classification	COAL OR WOOD ETC. Number of Fires	Losses	FUEL OIL Number of Fires	Losses	GASOLINE Number of Fires	Losses	NATURAL GAS Number of Fires	Losses
Assembly	45	$ 1,593,716	0	—	0	—	30	$ 353,588
Institutional	13	65,920	0	—	0	—	6	20,746
Residential	461	4,360,949	24	$ 319,279	15	$ 107,852	238	1,777,959
Business	3	502	2	21,132	0	—	6	84,705
Mercantile	25	1,791,271	0	—	6	104,673	26	1,478,340
Manufacturing	17	1,204,657	4	297,288	2	1,745	15	494,309
Storage	114	1,390,415	2	56,950	12	42,402	32	449,546
Special	1,236	763,986	57	1,040,437	1,304	4,659,716	6	24,237
Miscellaneous	157	523,068	2	61,400	11	162,272	13	493,709
TOTAL	2,071	$11,694,484	91	$1,796,486	1,350	$5,078,660	372	$5,177,139

Property Classification	PROPANE ETC. Number of Fires	Losses	SMOKERS' MATERIAL Number of Fires	Losses	ELECTRICITY Number of Fires	Losses	LIGHTNING Number of Fires	Losses
Assembly	13	$ 61,374	18	$1,871,803	46	$ 1,158,614	2	$ 42,500
Institutional	3	402	22	4,856	26	11,090	1	3,000
Residential	168	1,638,719	614	4,138,639	1,432	7,269,484	40	56,400
Business	8	261,150	11	34,896	25	109,442	0	—
Mercantile	11	569,389	16	195,432	68	1,644,979	2	57,000
Manufacturing	17	385,869	4	2,302	45	2,410,228	2	4,284
Storage	31	858,529	24	207,574	65	3,291,202	6	205,551
Special	197	1,239,307	559	311,679	1,049	3,724,198	7	15,005
Miscellaneous	21	1,060,855	33	406,994	97	2,552,962	16	374,143
TOTAL	469	$6,075,594	1,301	$7,174,175	2,853	$22,172,199	76	$757,883

Property Classification	UNCLASSIFIED OR UNKNOWN Number of Fires	Losses	TOTAL Number of Fires	Losses
Assembly	69	$ 9,850,301	223	$ 14,931,896
Institutional	3	36,075	74	142,089
Residential	643	11,503,942	3,635	31,173,223
Business	21	433,667	76	945,494
Mercantile	80	4,386,335	234	10,227,419
Manufacturing	78	15,813,827	184	20,614,509
Storage	311	13,360,689	597	19,862,858
Special	2,492	10,012,503	6,907	21,791,068
Miscellaneous	360	3,840,334	710	9,475,737
TOTAL	4,057	$69,237,673	12,640	$129,164,293

Commentary: Electricity was the most commonly identified fuel or energy (23%), causing the greatest losses (18%). The average loss in a fire initially fueled by fuel oil is in excess of $19,500.

PROPERTY LOSSES RELATED TO MATERIAL FIRST IGNITED 1981

Property Classification	BUILDING MATERIALS		FURNISHINGS		CLOTHING, TEXTILES		WOOD, PAPER PRODUCTS	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	27	$ 1,457,839	6	$ 301,012	11	46,001	60	2,417,903
Institutional	5	15,477	12	15,422	5	9,583	19	57,441
Residential	455	4,968,344	716	5,095,839	156	1,000,653	319	3,170,888
Business	14	291,102	5	1,770	4	2,050	10	9,479
Mercantile	22	650,586	6	554,733	8	72,078	39	3,031,088
Manufacturing	24	1,825,152	1	2,500	4	151,961	41	3,223,427
Storage	90	3,311,838	17	38,997	9	494,200	88	1,599,625
Special	89	743,922	251	307,732	63	118,041	581	2,253,889
Miscellaneous	106	559,209	5	821	3	2,151	106	539,625
TOTAL	832	$13,823,469	1,019	$6,319,026	263	$1,896,718	1,263	$16,303,425

Property Classification	FLAMMABLE LIQUIDS		FLAMMABLE GASES		CHEMICALS		AGRICULTURAL PRODUCTS	
	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses	Number of Fires	Losses
Assembly	48	$ 2,571,663	1	$ 125	4	$ 7,129	1	$ 500
Institutional	6	4,036	0	—	3	118	4	1,202
Residential	751	4,132,826	119	1,139,508	59	253,194	75	259,625
Business	8	220,246	4	75,711	0	—	1	15,000
Mercantile	41	1,135,761	13	284,686	3	37,325	6	6,227
Manufacturing	36	5,649,964	12	7,746,940	12	110,800	9	368,812
Storage	74	5,886,180	34	1,217,613	8	17,845	65	3,207,094
Special	1,608	6,282,136	65	802,240	95	227,254	1,317	1,485,830
Miscellaneous	36	1,811,752	26	1,712,875	5	249,102	203	906,232
TOTAL	2,608	$27,694,564	274	$12,979,698	189	$902,767	1,681	$6,250,522

Property Classification	MISCELLANEOUS		TOTAL	
	Number of Fires	Losses	Number of Fires	Losses
Assembly	65	$ 8,129,664	223	$ 14,931,896
Institutional	20	38,810	74	142,089
Residential	985	11,152,346	3,635	31,173,223
Business	30	330,136	76	945,494
Mercantile	96	4,454,735	234	10,227,419
Manufacturing	45	1,534,953	184	20,614,509
Storage	212	4,089,466	597	19,862,858
Special	2,838	9,570,024	6,907	21,791,068
Miscellaneous	220	3,693,970	710	9,475,737
TOTAL	4,511	$42,994,104	12,640	$129,164,293

Commentary: When identified, the materials first ignited that caused the greatest number of fires were flammable liquids (21%). Flammable liquids also caused the greatest losses (21%). The average loss in a fire where building materials were the materials first ignited was $16,615.

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1981

	1980					10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY	POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
CNTY 1, GRANDE PRAIRIE	11,269	163	2,921,723	14.4	259.27	926	7,931,567	8.2	70.38
BEAVERLODGE	1,908	6	169,593	3.1	88.88	52	347,142	2.7	18.19
HYTHE	680	1	20,000	1.4	29.41	16	129,861	2.3	19.09
SEXSMITH	1,184	7	36,703	5.9	30.99	54	278,129	4.5	23.49
WEMBLEY	1,221	3	11,919	2.4	9.76	14	124,554	1.1	10.20
TOTAL	16,262	180	3,159,938	11.0	194.31	1,062	8,811,253	6.5	54.18
CNTY 2, VULCAN	3,888	15	161,078	3.8	41.42	166	1,196,981	4.2	30.78
VULCAN	1,520	0	—	—	—	23	396,901	1.5	26.11
ARROWWOOD	160	0	—	—	—	5	3,345	3.1	2.09
CARMANGAY	271	2	3,273	7.3	12.07	8	10,638	2.9	3.92
CHAMPION	351	2	14,500	5.6	41.31	7	16,394	1.9	4.67
LOMOND	193	1	185	5.1	.95	6	28,991	3.1	15.02
MILO	107	0	—	—	—	6	13,349	5.6	12.47
TOTAL	6,490	20	179,036	3.0	27.58	221	1,666,599	3.4	25.67
CNTY 3, PONOKA	7,536	57	426,599	7.5	56.60	414	2,273,712	5.4	30.17
PONOKA	5,086	8	99,036	1.5	19.47	166	2,458,600	3.2	48.34
RIMBEY	1,880	8	8,002	4.2	4.25	55	90,892	2.9	4.83
TOTAL	14,502	73	533,637	5.0	36.79	635	4,823,204	4.3	33.25
CNTY 4, NEWELL	5,997	37	4,283,416	6.1	714.25	400	43,072,133	6.6	718.22
BROOKS	9,049	15	464,010	1.6	51.27	188	1,684,809	2.0	18.61
BASSANO	1,148	5	17,982	4.3	15.66	34	185,247	2.9	16.13
DUCHESS	420	0	—	—	—	11	28,146	2.6	6.70
ROSEMARY	311	0	—	—	—	5	6,645	1.6	2.13
TILLEY	311	0	—	—	—	6	26,144	1.9	8.40
TOTAL	17,236	57	4,765,408	3.3	276.47	644	45,003,124	3.7	261.09
CNTY 5, WARNER	3,574	16	266,281	4.4	74.50	195	1,270,708	5.4	35.55
WARNER	468	2	2,898	4.2	6.19	26	241,930	5.5	51.69
MILK RIVER	814	1	185	1.2	.22	29	133,788	3.5	16.43
RAYMOND	2,672	6	8,191	2.2	3.06	85	315,479	3.1	11.80
COUTTS	407	1	1,000	2.4	2.45	17	97,741	4.1	24.01
STIRLING	664	2	405	3.0	.60	14	67,490	2.1	10.16
TOTAL	8,599	28	278,960	3.2	32.44	366	2,127,136	4.2	24.73
CNTY 6, STETTLER	4,924	31	141,928	6.2	28.82	306	2,972,498	6.2	60.36
STETTLER	5,035	19	199,428	3.7	39.60	184	713,610	3.6	14.17
BIG VALLEY	344	1	14,464	2.9	42.04	10	52,324	2.9	15.21
BOTHA	160	1	1	6.2	—	7	25,051	4.3	15.65
DONALDA	278	0	—	—	—	5	42,051	1.7	15.12
GADSBY	48	2	45,001	41.6	937.52	5	46,863	10.4	97.63
ROCHON SANDS	44	1	1,076	22.7	24.45	6	21,207	13.6	48.19
WHITE SANDS	5	0	—	—	—	0	—	—	—
TOTAL	10,838	55	401,898	5.0	37.08	523	3,873,604	4.8	35.74
CNTY 7, THORHILD	3,324	17	112,233	5.1	33.76	122	743,612	3.6	22.37
THORHILD	547	3	334	5.4	.61	16	65,949	2.9	12.05
RADWAY	218	0	—	—	—	2	2,330	.9	1.06
TOTAL	4,089	20	112,567	4.8	27.52	140	811,891	3.4	19.85
CNTY 8, FORTY MILE	3,518	13	333,272	3.6	94.73	151	915,524	4.2	26.02
FOREMOST	576	4	48,079	6.9	83.47	36	219,109	6.2	38.03
BOW ISLAND	1,427	5	64,036	3.5	44.87	43	182,751	3.0	12.80
BURDETT	223	0	—	—	—	3	1,793	1.3	.80
TOTAL	5,744	22	445,387	3.8	77.53	233	1,319,177	4.0	22.96
CNTY 9, BEAVER	4,950	24	220,556	4.8	44.55	237	1,343,730	4.7	27.14
RYLEY	551	1	1,200	1.8	2.17	5	3,063	.9	.55
TOFIELD	1,440	3	14,203	2.0	9.86	32	290,721	2.2	20.18
VIKING	1,227	3	30,742	2.4	25.05	38	281,017	3.0	22.90
HOLDEN	393	0	—	—	—	8	26,966	2.0	6.86
TOTAL	8,561	31	266,701	3.6	31.15	320	1,945,497	3.7	22.72
CNTY 10, WETASKIWIN	8,475	58	551,928	6.8	65.12	407	2,741,963	4.8	32.35
CRYSTAL SPRINGS	43	0	—	—	—	3	20,667	6.9	48.06
MA-ME-O BEACH	87	4	63,001	45.9	724.14	13	185,933	14.9	213.71
MILLET	1,087	3	600	2.7	.55	23	50,170	2.1	4.61
SILVER BEACH	27	0	—	—	—	0	—	—	—

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1981

	1980					10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY	POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
GRANDVIEW	30	0	—	—	—	1	332	3.3	1.10
ARGENTIA BEACH	2	0	—	—	—	13	213,040	650.0	10,652.00
POPLAR BAY	31	0	—	—	—	0	—	—	—
TOTAL	97,82	65	615,529	6.6	62.92	460	3,212,105	4.7	32.83
CNTY 11, BARRHEAD	5,148	22	503,999	4.2	97.90	159	2,035,830	3.0	39.54
BARRHEAD	3,519	8	235,227	2.2	66.84	73	577,510	2.0	16.41
TOTAL	8,667	30	739,226	3.4	85.29	232	2,613,340	2.6	30.15
CNTY 12, ATHABASCA	5,406	41	383,018	7.5	70.85	275	1,856,525	5.0	34.34
ATHABASCA	1,846	7	152,401	3.7	82.55	69	2,331,877	3.7	126.32
BOYLE	644	1	1,500	1.5	2.32	18	106,064	2.7	16.46
ISLAND LAKE	37	0	—	—	—	0	—	—	—
SUNSET BEACH	24	0	—	—	—	1	2,000	4.1	8.33
MEWATHA BEACH	27	1	1	37.0	.03	1	1	3.7	—
TOTAL	7,984	50	536,920	6.2	67.24	364	4,296,467	4.5	53.81
CNTY 13, SMOKY LAKE	3,154	22	282,419	6.9	89.54	160	1,497,472	5.0	47.47
SMOKY LAKE	1,121	1	1	.8	—	29	110,681	2.5	9.87
VILNA	372	1	200	2.6	.53	11	59,825	2.9	16.08
WARSPITE	92	0	—	—	—	2	8,023	2.1	8.72
WASKATENAU	295	0	—	—	—	48	9,384	16.2	3.18
TOTAL	5,034	24	282,620	4.7	56.14	250	1,685,385	4.9	33.48
CNTY 14, LACOMBE	8,399	79	1,772,892	9.4	211.08	563	4,534,511	6.7	53.98
LACOMBE	5,489	22	298,903	4.0	54.45	145	892,221	2.6	16.25
ALIX	874	1	9,558	1.1	10.93	16	1,710,103	1.8	195.66
BENTLEY	825	2	31,801	2.4	38.54	28	1,091,395	3.3	132.29
BLACKFALDS	1,440	6	13,970	4.1	9.70	38	56,998	2.6	3.95
CLIVE	338	2	1,104	5.9	3.26	12	31,348	3.5	9.27
ECKVILLE	828	3	650	3.6	.78	33	167,376	3.9	20.21
GULL LAKE	92	3	87,891	32.6	955.33	15	199,139	16.3	216.45
MIRROR	479	1	1	2.0	—	22	143,418	4.5	29.94
BIRCHCLIFF	50	0	—	—	—	1	1,100	2.0	2.20
HALF MOON BAY	29	0	—	—	—	0	—	—	—
TOTAL	18,843	119	2,216,770	6.3	117.64	873	8,827,609	4.6	46.84
CNTY 16, WHEATLAND	4,944	78	542,954	15.7	109.82	377	3,558,295	7.6	71.97
STRATHMORE	2,975	14	60,524	4.7	20.34	60	1,166,122	2.0	39.19
GLEICHEN	339	2	28,044	5.8	82.72	13	64,494	3.8	19.02
CLUNY	105	3	3	28.5	.02	18	17,857	17.1	17.00
HUSSAR	178	0	—	—	—	9	1,794,637	5.0	1,008.22
ROCKYFORD	321	0	—	—	—	13	462,028	4.0	143.93
STANDARD	376	2	3,294	5.3	8.76	6	6,768	1.5	1.80
TOTAL	9,238	99	634,819	10.7	68.71	496	7,070,201	5.3	76.53
CNTY 17, MOUNTAIN VIEW	8,695	93	1,306,283	10.6	150.23	545	6,311,770	6.2	72.59
DIDSBURY	3,053	10	24,052	3.2	7.87	88	776,619	2.8	25.43
OLDS	4,757	15	90,969	3.1	19.12	146	4,044,951	3.0	85.03
SUNDRE	1,722	6	6,745	3.4	3.91	50	219,090	2.9	12.72
CARSTAIRS	1,568	3	8,400	1.9	5.35	46	344,436	2.9	21.96
CREMONA	365	3	52,940	8.2	145.04	17	112,311	4.6	30.77
*TOTAL**	20,160	130	1,489,389	6.4	73.87	892	11,809,177	4.4	58.57
CNTY 18, PAINTEARTH	2,603	29	120,386	11.1	46.24	131	859,315	5.0	33.01
CASTOR	1,207	0	—	—	—	23	68,977	1.9	5.71
CORONATION	1,389	8	402,252	5.7	289.59	50	704,955	3.5	50.75
HALKIRK	152	1	1	6.5	—	4	1,871	2.6	1.23
TOTAL	5,351	38	522,639	7.1	97.67	208	1,635,118	3.8	30.55
CNTY 19, ST. PAUL	5,973	52	945,775	8.7	158.34	363	2,715,399	6.0	45.46
ST. PAUL	5,118	16	1,436,140	3.1	280.60	158	1,815,802	3.0	35.47
ELK POINT	1,053	4	57,066	3.7	54.18	29	171,401	2.7	16.27
TOTAL	12,144	72	2,438,970	5.9	200.83	550	4,702,602	4.5	38.72
CNTY 20, STRATHCONA	46,571	301	3,577,749	6.4	76.82	2,620	15,679,180	5.6	33.66
FT. SASKATCHEWAN	12,157	28	7,093,874	2.3	583.52	277	9,169,779	2.2	75.42
TOTAL	58,728	329	10,671,623	5.6	181.71	2,897	24,848,959	4.9	42.31
CNTY 21, TWO HILLS	3,636	14	56,017	3.8	15.40	129	920,524	3.5	25.31
TWO HILLS	1,330	3	11,620	2.2	8.73	17	32,846	1.2	2.46

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1981

	1980					10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY	POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
DERWENT	147	2	13,061	13.6	88.85	3	14,290	2.0	9.72
MYRNAM	411	0	—	—	—	7	60,423	1.7	14.70
WILLINGDON	359	0	—	—	—	9	73,899	2.5	20.58
HAIRY HILL	96	0	—	—	—	0	—	—	—
TOTAL	5,979	19	80,698	3.1	13.49	165	1,101,982	2.7	18.43
CNTY 22, CAMROSE	7,367	42	291,855	5.7	39.61	445	1,579,376	6.0	21.43
BASHAW	885	1	500	1.1	.56	27	101,616	3.0	11.48
BAWLF	351	0	—	—	—	13	111,003	3.7	31.62
BITTERN LAKE	134	0	—	—	—	3	33,815	2.2	25.23
EDBERG	140	0	—	—	—	5	72,108	3.5	51.50
FERINTOSH	166	0	—	—	—	2	1,501	1.2	.90
HAY LAKES	302	1	3,940	3.3	13.04	13	21,719	4.3	7.19
NEW NORWAY	289	0	—	—	—	8	1,751	2.7	.60
ROSALIND	186	0	—	—	—	0	—	—	—
TOTAL	9,820	44	296,295	4.4	30.17	516	1,922,889	5.2	19.58
CNTY 23, RED DEER	13,575	107	691,867	7.8	50.96	857	4,338,652	6.3	31.96
INNISFAIL	5,188	17	1,122,460	3.2	216.35	120	1,450,717	2.3	27.96
SYLVAN LAKE	3,650	16	127,236	4.3	34.85	100	704,039	2.7	19.28
BOWDEN	1,021	1	550	.9	.53	28	550,333	2.7	53.90
DELBURNE	555	2	17,542	3.6	31.60	13	33,599	2.3	6.05
ELNORA	262	0	—	—	—	5	51,516	1.9	19.66
PENHOLD	1,518	4	72,501	2.6	47.76	28	968,136	1.8	63.77
NORGLENWOLD	93	0	—	—	—	3	166,600	3.2	179.13
TOTAL	25,862	147	2,032,156	5.6	78.57	1,154	8,263,592	4.4	31.95
CNTY 24, VERMILION RIVER	6,967	81	476,735	11.6	68.42	434	2,646,155	6.2	37.98
KITSCOTY	500	1	50	2.0	.10	7	3,329	1.4	.66
VERMILION	3,677	18	184,047	4.8	50.05	88	1,099,998	2.3	29.91
DEWBERRY	164	0	—	—	—	3	90,858	1.8	55.40
MARWAYNE	450	1	100	2.2	.22	12	908,946	2.6	201.98
PARADISE VALLEY	182	1	25,581	5.4	140.55	4	42,481	2.1	23.34
TOTAL	11,940	102	686,513	8.5	57.49	548	4,791,767	4.5	40.13
CNTY 25, LEDUC	11,424	79	1,450,942	6.9	127.00	660	6,812,293	5.7	59.63
LEDUC	12,191	33	891,141	2.7	73.09	257	2,004,870	2.1	16.44
CALMAR	978	1	65,443	1.0	66.91	24	172,334	2.4	17.62
DEVON	3,804	8	25,047	2.1	6.58	54	723,923	1.4	19.03
BRETON	566	0	—	—	—	12	47,018	2.1	8.30
NEW SAKEPTA	410	2	58,714	4.8	143.20	9	94,793	2.1	23.12
THORSBY	701	0	—	—	—	29	705,451	2.1	100.63
WARBURG	507	0	—	—	—	15	361,748	2.9	71.35
ITASKA BEACH	5	0	—	—	—	0	—	—	—
GOLDEN DAYS	23	0	—	—	—	0	—	—	—
SUNDANCE BEACH	18	0	—	—	—	1	10,651	5.5	59.17
BEAUMONT	2,622	3	14,882	1.1	5.67	16	71,990	.6	2.74
TOTAL	33,249	126	2,506,169	3.7	75.37	1,077	11,005,071	3.2	33.09
CNTY 26, LETHBRIDGE	9,243	70	404,002	7.5	43.70	618	3,339,438	6.6	36.12
COALDALE	4,449	3	4,300	.6	.96	122	956,152	2.7	21.49
PICTURE BUTTE	1,393	2	14,635	1.4	10.50	35	105,714	2.5	7.58
BARONS	285	1	148	3.5	.51	11	56,222	3.8	19.72
NOBLEFORD	551	2	7,255	3.6	13.16	10	18,255	1.8	3.31
COALHURST	881	4	5,788	4.5	6.56	13	55,088	1.4	6.25
TOTAL	16,802	82	436,128	4.8	25.95	809	4,530,869	4.8	26.96
CNTY 27, MINBURN	4,609	34	227,417	7.3	49.34	266	981,701	5.7	21.29
MINBURN	143	0	—	—	—	6	13,436	4.1	9.39
MANNVILLE	812	3	37,456	3.6	46.12	12	45,982	1.4	5.66
VEGREVILLE	4,809	11	38,660	2.2	8.03	115	262,447	2.3	5.45
INNISFREE	267	0	—	—	—	4	17,219	1.4	6.44
LAVOY	136	0	—	—	—	5	4,753	3.6	3.49
TOTAL	10,776	48	303,533	4.4	28.16	408	1,325,538	3.7	12.30
CNTY 28, LAC STE. ANNE	6,586	33	432,717	5.0	65.70	297	2,043,082	4.5	31.02
ONOWAY	611	1	8,000	1.6	13.09	21	131,097	3.4	21.45
MAYERTHORPE	1,502	6	466,290	3.9	310.44	31	615,301	2.0	40.96

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1981

		1980				10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY	POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
ALBERTA BEACH	496	6	24,406	12.0	49.20	38	186,374	7.6	37.57
CASTLE ISLAND	4	0	—	—	—	0	—	—	—
SUNSET POINT	60	0	—	—	—	2	2,200	3.3	3.66
SANGUDO	404	0	—	—	—	14	23,433	3.4	5.80
WEST COVE	37	0	—	—	—	5	111,850	13.5	302.29
YELLOWSTONE	71	1	1,000	14.0	14.08	2	1,314	2.8	1.85
ROSS HAVEN	52	0	—	—	—	1	3,625	1.9	6.97
VAL QUENTIN	105	0	—	—	—	2	2,489	1.9	2.37
SILVER SANDS	63	0	—	—	—	3	4,051	4.7	6.43
NAKAMUN PARK	8	0	—	—	—	0	—	—	—
SOUTH VIEW	33	0	—	—	—	0	—	—	—
TOTAL	10,032	47	932,413	4.6	92.94	416	3,124,816	4.1	31.14
CNTY 29, FLAGSTAFF	4,653	63	134,822	13.5	28.97	374	1,745,922	8.0	37.52
SEDGEWICK	848	2	7,181	2.3	8.46	17	290,836	2.0	34.29
ALLIANCE	228	0	—	—	—	13	13,049	5.7	5.72
DAYSLAND	673	1	400	1.4	.59	23	39,196	3.4	5.82
HARDISTY	671	1	—	1.4	—	35	99,584	5.2	14.84
FORESTBURG	968	2	6,308	2.0	6.51	19	19,090	1.9	1.97
GALAHAD	184	0	—	—	—	5	21,049	2.7	11.43
HEISLER	215	0	—	—	—	6	6,682	2.7	3.10
KILLAM	1,005	1	54,669	.9	54.39	25	269,953	2.4	26.86
LOUGHEED	244	2	16,292	8.1	66.77	8	137,857	3.2	56.49
STROME	299	1	1,750	3.3	5.85	12	143,702	4.0	48.06
TOTAL	9,988	73	221,423	7.3	22.16	537	2,786,920	5.3	27.90
CNTY 30, LAMONT	4,625	27	166,785	5.8	36.06	232	1,520,815	5.0	32.88
LAMONT	1,534	3	628	1.9	.40	15	237,801	.9	15.50
CHIPMAN	273	0	—	—	—	7	118,521	2.5	43.41
MUNDARE	668	0	—	—	—	6	23,879	.8	3.57
ANDREW	565	3	16,304	5.3	28.85	22	142,571	3.8	25.23
BRUDERHEIM	1,132	1	141	.8	.12	18	180,522	1.5	15.94
TOTAL	8,797	34	183,858	3.8	20.90	300	2,244,109	3.4	25.28
CNTY 31, PARKLAND	22,451	203	2,299,518	9.0	102.42	1,393	11,584,046	6.2	51.59
STONY PLAIN	4,834	3	780	.6	.16	56	182,500	1.1	3.77
BETULA BEACH	4	0	—	—	—	1	744	25.0	18.60
EDMONTON BEACH	329	0	—	—	—	8	110,918	2.4	33.71
ENTWISTLE	499	0	—	—	—	5	39,015	1.0	7.81
KAPASIWIN	2	0	—	—	—	4	44,603	200.0	2,230.15
LAKEVIEW	13	0	—	—	—	0	—	—	—
POINT ALISON	8	0	—	—	—	2	6,050	25.0	75.32
SEBA BEACH	139	1	14,300	7.1	102.87	14	64,395	10.0	46.32
SPRUCE GROVE	9,749	68	70,750	6.9	7.25	281	964,959	2.8	9.89
DRAYTON VALLEY	5,076	20	182,626	3.9	35.97	166	657,469	3.2	12.95
WABAMUN	648	0	—	—	—	15	65,968	2.3	10.18
TOTAL	43,752	295	2,567,974	6.7	58.69	1,945	13,720,667	4.4	31.36
M.D. 6, CARDSTON	4,443	33	260,608	7.4	58.65	254	1,898,341	5.7	42.72
CARDSTON	3,043	10	118,316	3.2	38.88	96	483,589	3.1	15.89
M\GRATH	1,464	4	8,822	2.7	6.02	50	143,487	3.4	9.80
GLENWOOD	257	2	564	7.7	2.19	9	12,334	3.5	4.79
HILLSPRING	192	0	—	—	—	4	22,068	2.0	11.49
TOTAL	9,399	49	388,310	5.2	41.31	413	2,559,819	4.3	27.23
M.D. 9, PINCHER CREEK	2,879	17	187,560	5.9	65.14	159	2,654,271	5.5	92.19
PINCHER CREEK	3,825	11	58,712	2.8	15.34	102	818,078	2.6	21.38
COWLEY	333	3	4,247	9.0	12.75	6	7,302	1.8	2.19
TOTAL	7,037	31	250,519	4.4	35.60	267	3,479,651	3.7	49.44
M.D. 14, TABER.	5,784	85	414,450	14.6	71.65	407	2,277,930	7.0	39.38
TABER	5,855	19	162,980	3.2	27.83	209	2,046,574	3.5	34.95
VAUXHALL	1,075	2	24,181	1.8	22.49	30	404,498	2.7	37.62
GRASSY LAKE	70	4	24,597	57.1	351.38	11	28,008	15.7	40.01
BARNWELL	351	0	—	—	—	0	—	—	—
TOTAL	13,135	110	626,208	8.3	47.67	657	4,757,010	5.0	36.21
M.D. 26, WILLOW CREEK	4,422	67	197,115	15.1	44.57	338	1,169,766	7.6	26.45

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	MUNICIPALITY	POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
	STAVELY	516	0	—	—	—	9	17,423	1.7	3.37
	NANTON	1,527	9	38,981	5.8	25.52	37	570,086	2.4	37.33
	CLARESHOLM	3,425	23	281,868	6.7	82.29	144	1,423,029	4.2	41.54
	FT. MACLEOD	3,123	12	52,636	3.8	16.85	105	783,751	3.3	25.09
	GRANUM	419	4	19,840	9.5	47.35	17	66,542	4.0	15.88
	*TOTAL**	13,432	115	590,440	8.5	43.95	650	4,030,597	4.8	30.00
M.D. 31,	FOOTHILLS	9,069	52	392,751	5.7	43.30	444	3,044,531	4.8	33.57
	HIGH RIVER	4,632	10	13,745	2.1	2.96	103	1,250,678	2.2	27.00
	BLACK DIAMOND	1,465	4	95,301	2.7	65.05	18	177,377	1.2	12.10
	OKOTOKS	3,782	4	27,881	1.0	7.37	66	284,643	1.7	7.52
	BLACKIE	329	0	—	—	—	3	39,406	.9	11.97
	CAYLEY	213	0	—	—	—	4	43,869	1.8	20.59
	TURNER VALLEY	1,263	4	89,205	3.1	70.62	26	380,168	2.0	30.10
	LONGVIEW	281	1	62,500	3.5	222.41	3	64,888	1.0	23.09
	TOTAL	21,034	75	681,383	3.5	32.39	667	5,285,560	3.1	25.12
M.D. 34,	ACADIA	651	0	—	—	—	17	127,074	2.6	19.51
	EMPRESS	238	0	—	—	—	6	8,769	2.5	3.68
	TOTAL	889	0	—	—	—	23	135,843	2.5	15.28
M.D. 44,	ROCKY VIEW	16,863	240	1,569,470	14.2	93.07	1,395	10,069,034	8.2	59.71
	AIRDRIE	8,265	10	86,196	1.2	10.42	56	552,029	.6	6.67
	BEISEKER	600	2	6,071	3.3	10.11	23	74,970	3.8	12.49
	COCHRANE	3,566	19	397,992	5.3	111.60	65	592,059	1.8	16.60
	CROSSFIELD	1,171	1	2,050	.8	1.75	22	358,899	1.8	30.64
	IRRICANA	545	1	1	1.8	—	10	24,453	1.8	4.48
	CHESTERMERE LAKE	485	1	50	2.0	.10	6	64,461	1.2	13.29
	TOTAL	31,495	274	2,061,830	8.6	65.46	1,577	11,735,905	5.0	37.26
M.D. 47,	STARLAND	2,223	8	53,607	3.5	24.11	138	845,827	6.2	38.04
	MORRIN	245	2	33,681	8.1	137.47	10	184,457	4.0	75.28
	DELIA	232	2	12,750	8.6	54.95	8	14,409	3.4	6.21
	MUNSON	125	0	—	—	—	1	40	.8	.03
	RUMSEY	89	0	—	—	—	7	26,509	7.8	29.78
	TOTAL	2,914	12	100,038	4.1	34.33	164	1,071,242	5.6	36.76
M.D. 48,	KNEEHILL	5,974	36	210,688	6.0	35.26	287	2,179,383	4.8	36.48
	THREE HILLS	1,868	6	4,485	3.2	2.40	60	95,369	3.2	5.10
	ACME	411	0	—	—	—	8	188,458	1.9	45.85
	TROCHU	854	2	6,650	2.3	7.78	36	467,222	4.2	54.70
	CARBON	453	1	470	2.2	1.03	8	14,581	1.7	3.21
	LINDEN	401	0	—	—	—	5	1,052	1.2	.26
	TORRINGTON	279	1	1	3.5	—	11	53,517	3.9	19.18
	TOTAL	10,240	46	222,294	4.4	21.70	415	2,999,582	4.0	29.29
M.D. 52,	PROVOST	2,665	31	70,422	11.6	26.42	271	1,862,350	10.1	69.88
	PROVOST	1,755	4	42,613	2.2	24.28	69	1,402,729	3.9	79.92
	AMISK	192	1	5,000	5.2	26.04	3	9,000	1.5	4.68
CZAR	190	0	—	—		—	7	11,886	3.6	6.25
	HUGHENDEN	265	1	655	3.7	2.47	7	42,221	2.6	15.93
	TOTAL	5,067	37	118,690	7.3	23.42	357	3,328,186	7.0	65.68
M.D. 61,	WAINWRIGHT	3,837	33	111,178	8.6	28.97	299	1,533,432	7.7	39.96
	WAINWRIGHT	4,462	26	70,439	5.8	15.78	141	806,456	3.1	18.07
	IRMA	500	2	4,369	4.0	8.73	22	52,164	4.4	10.43
	CHAUVIN	310	1	229	3.2	.73	11	824,217	3.5	265.87
	EDGERTON	400	4	1,202	10.0	3.00	14	154,308	3.5	38.57
	TOTAL	9,509	66	187,417	6.9	19.70	487	3,370,577	5.1	35.44
M.D. 87,	BONNYVILLE	9,916	38	534,433	3.8	53.89	348	2,586,125	3.5	26.08
	BONNYVILLE	4,381	18	278,452	4.1	63.55	111	1,255,984	2.5	28.66
	COLD LAKE	2,058	11	60,587	5.3	29.43	67	252,006	3.2	12.24
	GRAND CENTRE	3,057	10	134,306	3.2	43.93	111	1,484,464	3.6	48.55
	BONNYVILLE BEACH	44	0	—	—	—	2	20,180	4.5	45.86
	GLENDON	454	2	7,859	4.4	17.31	12	43,210	2.6	9.51
	PELICAN NARROWS	25	0	—	—	—	0	—	—	—
	TOTAL	19,935	79	1,015,637	3.9	50.94	651	5,641,969	3.2	28.30
M.D. 90,	STURGEON	13,682	131	5,877,763	9.5	429.59	979	10,944,113	7.1	79.98

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	MORINVILLE	4,584	6	16,868	1.3	3.67	78	594,743	1.7	12.97
	GIBBONS	2,310	5	74,709	2.1	32.34	30	136,067	1.2	5.89
	SANDY BEACH	65	0	—	—	—	1	22,000	1.5	33.84
	BON ACCORD	1,374	1	15,688	.7	11.41	16	106,892	1.1	7.77
	LEGAL	1,032	1	6,299	.9	6.10	20	61,265	1.9	5.93
	REDWATER	1,963	6	50,174	3.0	25.55	30	146,605	1.5	7.46
	TOTAL	25,010	150	6,041,501	5.9	241.56	1,154	12,011,685	4.6	48.02
M.D. 92.	WESTLOCK	6,755	29	441,481	4.2	65.35	267	2,357,046	3.9	34.89
	WESTLOCK	3,824	8	12,464	2.0	3.25	75	1,085,538	1.9	28.38
	CLYDE	400	3	1,723	7.5	4.30	12	42,819	3.0	10.70
	TOTAL	10,979	40	455,668	3.6	41.50	354	3,485,403	3.2	31.74
M.D. 130.	SMOKY RIVER	2,990	28	264,643	9.3	88.50	226	1,420,227	7.5	47.49
	FALHER	1,204	5	24,293	4.1	20.17	40	507,742	3.3	42.17
	GIROUXVILLE	315	1	372	3.1	1.18	16	486,194	5.0	154.34
	MCLENNAN	1,212	2	1,001	1.6	.82	57	888,646	4.7	73.32
	DONNELLY	362	1	8,100	2.7	22.37	32	243,492	8.8	67.26
	TOTAL	6,083	37	298,409	6.0	49.05	371	3,546,301	6.0	58.29
M.D. 133.	SPIRIT RIVER	857	12	34,412	14.0	40.15	114	449,395	13.3	52.43
	SPIRIT RIVER	1,107	4	21,971	3.6	19.84	42	153,612	3.7	13.87
	RYCROFT	538	3	21,431	5.5	39.83	17	569,177	3.1	105.79
	TOTAL	2,502	19	77,814	7.5	31.10	173	1,172,184	6.9	46.84
M.D. 135.	PEACE RIVER	1,583	22	378,838	13.8	239.31	200	1,503,393	12.6	94.97
	BERWYN	585	2	124,357	3.4	212.57	4	126,836	.6	21.68
	GRIMSHAW	2,368	3	6,000	1.2	2.53	68	405,738	2.8	17.13
	PEACE RIVER	6,043	31	203,904	5.1	33.74	235	2,413,194	3.8	39.93
	TOTAL	10,579	58	713,099	5.4	67.40	507	4,449,161	4.7	42.05
M.D. 136.	FAIRVIEW	1,821	16	235,024	8.7	129.06	144	1,109,884	7.9	60.94
	FAIRVIEW	3,027	12	741,690	3.9	245.02	99	3,741,524	3.2	123.60
	TOTAL	4,848	28	976,714	5.7	201.46	243	4,851,408	5.0	100.07
I.D. #1		5,390	91	434,862	16.8	80.67	519	5,098,001	9.6	94.58
	IRVINE	366	1	500	2.7	1.36	10	84,842	2.7	23.18
	REDCLIFF	3,641	13	212,079	3.5	58.24	133	492,550	3.6	13.52
	TOTAL	9,397	105	647,441	11.1	68.89	662	5,675,393	7.0	60.39
I.D. #4		194	1	671	5.1	3.45	10	30,491	5.1	15.71
I.D. #6	150	3	27,167	20.0		181.11	56	613,924	37.3	409.28
	CROWSNEST PASS	7,340	32	120,885	4.3	16.46	232	1,998,696	3.1	27.23
	TOTAL	7,490	35	148,052	4.6	19.76	288	2,612,620	3.8	34.88
I.D. #7		1,266	10	35,465	7.8	28.01	113	1,582,855	8.9	125.02
I.D. #8		1,204	17	352,353	14.1	292.65	112	1,817,208	9.3	150.93
	GHOST LAKE	42	1	4,710	23.8	112.14	4	9,207	9.5	21.92
	CANMORE	3,448	21	455,756	6.0	132.17	87	864,944	2.5	25.08
	TOTAL	4,694	39	812,819	8.3	173.16	203	2,691,359	4.3	57.33
I.D. #9		6,949	6	415,106	.8	59.73	120	1,286,752	1.7	18.51
	BANFF	5,312	11	1,047,902	2.0	197.27	150	2,885,445	2.8	54.31
	TOTAL	12,261	17	1,463,008	1.3	119.32	270	4,172,197	2.2	34.02
I.D. #10		8,548	37	428,329	4.3	50.10	425	5,789,424	4.9	67.72
	ROCKY MT. HOUSE	4,735	19	30,175	4.0	6.37	130	1,253,781	2.7	26.47
	CAROLINE	450	2	26,522	4.4	58.93	7	32,203	1.5	7.15
	TOTAL	13,733	58	485,026	4.2	35.31	562	7,075,408	4.0	51.52
I.D. #12		3,926	10	229,853	2.5	58.54	62	575,443	1.5	14.65
	JASPER	4,000	10	79,647	2.5	19.91	104	2,842,897	2.6	71.07
	TOTAL	7,926	20	309,500	2.5	39.04	166	3,418,340	2.0	43.12
I.D. #13		33	0	—	—	—	4	11,153	12.1	33.79
I.D. #14		7,586	59	842,228	7.7	111.02	552	5,443,115	7.2	71.75
	WILDWOOD	445	1	1	2.2	—	10	78,131	2.2	17.55
	EVANSBURG	798	3	27,297	3.7	34.20	18	111,373	2.2	13.95
	EDSON	6,027	25	462,727	4.1	76.77	173	1,235,775	2.8	20.50
	HINTON	8,532	36	349,809	4.3	41.88	269	2,911,811	3.2	34.86
	TOTAL	23,208	124	1,682,062	5.3	72.47	1,022	9,780,205	4.4	42.14
I.D. #15		2,214	23	550,684	10.3	248.72	210	4,398,011	9.4	198.64
	WHITECOURT	5,408	29	151,876	5.3	28.08	232	1,957,039	4.2	36.18

MUNICIPAL FIRE LOSS STATISTICS FOR THE YEAR ENDING DECEMBER 31, 1981

		1980					10 YEAR TOTAL		10 YEAR AVERAGE	
MUNICIPALITY		POPULATION	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS	FIRE COUNT	AMOUNT OF LOSS	FIRE RATE	PER CAPITA LOSS
	FORT ASSINIBOINE	215	0	—	—	—	19	89,414	8.8	41.58
	TOTAL	7,837	52	702,560	6.6	89.64	461	6,444,464	5.8	82.23
I.D. #16		4,561	69	1,130,293	15.1	247.81	475	15,861,901	10.4	347.77
	VALLEYVIEW	2,066	6	35,127	2.9	17.00	74	646,041	3.5	31.27
	FOX CREEK	1,905	4	444,926	2.0	233.55	45	1,254,312	2.3	65.84
	GRANDE CACHE	4,423	3	110,044	.6	24.87	114	767,279	2.5	17.34
	TOTAL	12,955	82	1,720,390	6.3	132.79	708	18,529,533	5.4	143.02
I.D. #17		11,222	100	2,168,014	8.9	193.19	769	12,271,391	6.8	109.35
	HIGH PRAIRIE	2,414	9	1,317,646	3.7	545.83	110	4,743,193	4.5	196.48
	SWAN HILLS	2,473	9	145,625	3.6	58.84	43	617,555	1.7	24.97
	KINUSO	305	0	—	—	—	4	32,485	1.3	10.65
	SLAVE LAKE	4,328	21	106,533	4.8	24.61	126	1,021,348	2.9	23.59
	NAMPA	352	0	—	—	—	9	963,563	2.5	273.73
	TOTAL	21,094	139	3,737,718	6.5	177.19	1,061	19,649,535	5.0	93.15
I.D. #18		8,641	119	3,491,217	13.7	404.02	680	34,105,937	7.8	394.69
	LAC LA BICHE	2,035	5	9,833	2.4	4.83	78	368,549	3.8	18.11
	PLAMONDON	256	1	1,500	3.9	5.85	3	1,069,779	1.1	417.88
	TOTAL	10,932	125	3,502,550	11.4	320.39	761	35,544,265	6.9	325.13
I.D. #19		1,816	19	652,422	10.4	359.26	151	2,063,219	8.3	113.61
	WANHAM	233	1	41,458	4.2	177.93	22	159,217	9.4	68.33
	EAGLESHAM	229	0	—	—	—	3	10,363	1.3	4.52
	TOTAL	2,278	20	693,880	8.7	304.60	176	2,232,799	7.7	98.01
I.D. #20		2,689	9	86,584	3.3	32.19	100	1,307,045	3.7	48.60
I.D. #21		2,648	26	413,754	9.8	156.25	131	1,525,922	4.9	57.62
	HINES CREEK	527	5	323,140	9.4	613.16	23	641,845	4.3	121.79
	TOTAL	3,175	31	736,894	9.7	232.09	154	2,167,767	4.8	68.27
I.D. #22		3,132	34	704,999	10.8	225.09	206	1,807,767	6.5	57.71
	MANNING	1,216	7	57,672	5.7	47.42	34	281,214	2.7	23.12
	TOTAL	4,348	41	762,671	9.4	175.40	240	2,088,981	5.5	48.04
I.D. #23		5,880	52	914,187	8.8	155.47	438	6,713,471	7.4	114.17
	HIGH LEVEL	2,189	10	232,772	4.5	106.33	87	2,159,762	3.9	98.66
	RAINBOW LAKE	753	2	7,422	2.6	9.85	12	200,994	1.5	26.69
	TOTAL	8,822	64	1,154,381	7.2	130.85	537	9,074,228	6.0	102.85
I.D. #24		199	1	5,000,000	5.0	25,125.62	5	5,030,400	2.5	2,527.83
S.A. #1		39,380	87	1,186,015	2.2	30.11	629	6,573,651	1.5	16.69
S.A. #2		2,521	18	254,299	7.1	100.87	166	1,360,761	6.5	53.97
	HANNA	2,816	10	376,280	3.5	133.62	86	548,851	3.0	19.49
	TOTAL	5,337	28	630,579	5.2	118.15	252	1,909,612	4.7	35.78
S.A. #3		2,056	12	82,039	5.8	39.90	98	498,842	4.7	24.26
	CEREAL	231	1	56,639	4.3	245.19	7	132,388	3.0	57.31
	OYEN	1,018	1	1,694	.9	1.66	23	170,948	2.2	16.79
	YOUNGSTOWN	308	0	—	—	—	5	284,177	1.6	92.26
	TOTAL	3,613	14	140,372	3.8	38.85	133	1,086,355	3.6	30.06
S.A. #4		1,684	7	22,300	4.1	13.24	95	1,106,338	5.6	65.69
	VETERAN	315	3	1,737,339	9.5	5,515.36	13	1,877,654	4.1	596.08
	CONSORT	609	8	3,709	4.9	6.09	27	764,121	4.4	125.47
	TOTAL	2,608	13	1,763,348	4.9	676.13	135	3,748,113	5.1	143.71
CALGARY		591,857	3,878	19,269,475	6.5	32.55	28,602	96,630,933	4.8	16.32
CAMROSE		12,357	32	51,207	2.5	4.14	285	1,286,405	2.3	10.41
DRUMHELLER		6,380	22	68,430	3.4	10.72	241	2,300,264	3.7	36.05
EDMONTON		529,924	1,964	14,875,301	3.7	28.07	17,876	79,135,045	3.3	14.93
FORT MCMURRAY		30,772	261	2,113,963	8.4	68.69	1,318	6,987,487	3.8	18.11
GRANDE PRAIRIE		24,168	243	1,735,829	10.0	71.82	1,521	6,707,480	6.2	27.75
LETHBRIDGE		54,624	424	3,395,426	7.7	62.15	2,859	13,497,130	5.2	24.70
LLOYDMINSTER		9,029	31	563,328	3.4	62.39	191	2,478,912	2.1	27.45
MEDICINE HAT		39,934	425	765,380	10.6	19.16	2,821	8,369,657	7.0	20.95
RED DEER		45,405	316	924,035	6.9	20.35	1,690	5,629,295	3.7	12.39
WETASKIWIN		9,551	21	1,966,438	2.1	205.88	236	5,441,460	2.4	56.97
ST. ALBERT		31,180	223	688,327	7.1	22.07	1,208	5,067,670	3.8	16.25

SECTION THREE

GLOSSARY OF TERMINOLOGY

GLOSSARY OF TERMINOLOGY

ACT OR OMISSION — The human element by which someone has done something (an act) or failed to do something (an omission). The act or omission indicates whether the fire was deliberate, neglectful or accidental.

Incendiary or Set Fires — includes arson, suspected incendiarism, riot, mischief, or vandalism.

Misuse of Source of Ignition — includes disposal of smokers' material, thawing, inadequate control of an open fire, children playing, welding or cutting too close to combustible material, or torch too close to combustible material.

Misuse of Material Ignited — includes fuel spilled accidentally, improper fuelling technique, cleaning or washing parts, improper container, combustible placed too close to heat, and improper storage.

Mechanical and Electrical Failure or Malfunction — includes part failure, automatic or manual control failure, electrical short circuit, lack of maintenance, and part worn out.

Construction, Design or Installation Deficiency — includes construction or design deficiency, installation too close to a combustible, other installation deficiency and overfusing.

Misuse of Equipment — includes any misuse of equipment or tools.

Human Failing — includes person asleep, temporary loss of judgement, physical disability, panic, influence of alcohol or drugs.

AREA OF ORIGIN — the area of a building or vehicle where the fire started.

Means of Egress — the area allowing an individual transit or a way of going out. Includes hallway, stairway, escalator, lobby and elevator.

Assembly, Sales Area — areas where groups of people gather. Includes theatre, arena, lounge, living room, sales or show room, library, museum and sports facility.

Function Area — the area where a mode of action or activity is undertaken. Includes sleeping area, dining area, bar, washroom, office, laboratory, printing and photographic reproduction, kitchen, laundry room, operating room, performance area and manufacturing area.

Storage Area — the area inside a building where items are stored. Includes product storage area, closet, equipment area, records storage area, shipping and receiving area, trash and rubbish area, vehicle garage and agricultural product storage.

Service Facilities — conveyance items such as dumbwaiters, service shafts, laundry and garbage chutes, heating and cooking ducts, and chimneys or gas vents.

Structural Area — includes crawl space, balcony, ceiling and floor assembly, ceiling and roof assembly, wall assembly, exterior wall or exterior roof, awning or canopy.

Vehicle Area — includes engine area, fuel area, control area, passenger area, and cargo area.

Outside Area — includes open area such as lawn, field or park, court, patio, parking area, outdoor storage area, and trash or rubbish area.

FUEL OR ENERGY — is the fuel associated with the source of ignition. Includes coal, wood, fuel oil, gasoline, natural gas, propane, smokers' material, electricity, or lightning.

MATERIAL FIRST IGNITED — the actual material that ignites and creates the fire condition.

Structural Components, Finish Materials — includes roof covering, wall covering, floor covering, structural component, ceiling covering, and insulation.

Furniture, Furnishings — includes furniture, ironing board, mattress, bedding, drapery and broom, mop or brush.

Clothing, Textiles — includes clothing, fabric, fur and tarpaulin.

Wood, Paper Products — includes wood, wood shavings, paper, cardboard and paper stock.

Flammable Liquids — includes gasoline, fuel oil, flammable liquids, paint, varnish, tar, asphalt, polish and wax.

Flammable Gases — includes natural gas, propane, anaesthetic gas, acetylene and hydrogen. Chemicals — includes starch, flour, cellulose nitrate, plastic, oxidizing material, magnesium and alloys, titanium, natural or synthetic rubber, and ammonium nitrate.

Agricultural, Forestry Products — includes fibres, grains, hay, trees, felled timber, grass, fertilizer and manure.

Miscellaneous — includes coal, garbage, trash, oily rags and artificial trees.

PROPERTY CLASSIFICATION — the principal use or occupancy of the building.

Assembly — property for the gathering of persons for civic, political, travel, religious, social, educational or recreational purposes. Includes theatres, amusement or recreation places, schools, colleges, universities, churches, social or sport clubs, libraries and museums, eating establishments and passenger terminals.

Institutional — property for medical treatment, or care of persons suffering from illness, disease or infirmity, for the care of infants, convalescents or aged persons and for penal or corrective purposes. Includes prisons, jails, reformatories, homes for the aged, children's hospitals, hospitals, and clinics.

Residential — property in which sleeping accommodation is provided for normal residential purposes. Includes one and two family residences, apartments, rooming or boarding houses, hotels, motels, dormitories and mobile homes.

Business and Personal Service — property for conducting business. Includes offices, personal services such as hairdressing, and data processing or storage facilities.

Mercantile — property used for the display and sale of merchandise. Includes food and beverage sales, textile and clothing sales, furniture and appliance sales, books and specialty sales, recreational and hobby supply sales, repair shops, laundries, vehicle and boat sales and department or variety stores.

Industrial Manufacturing Properties — property where raw materials are transformed into new products and where the component parts of manufactured products are assembled. Includes chemical, petroleum, paint and plastic manufacturing; wood, furniture, and paper manufacturing; metal product and electrical equipment manufacturing; food processing; beverage, tobacco, soap and margarine manufacturing; textile manufacturing; footwear and wearing apparel manufacturing; and vehicle and related equipment manufacturing.

Industrial Storages Properties — property used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals. Includes agricultural product storage; textile, fibre and clothing storage; processed food and beverage storage; flammable liquids, gas and petroleum storage; wood, furniture, and paper products storage; chemical, paint and plastic storage; metal product, machinery, and electrical appliance storage; and vehicle storage.

Special — mainly outdoor property and transport equipment. Includes outdoor property, piers, buildings under construction or demolition, watercraft, rail transport vehicles, ground transport vehicles, aircraft, and other special equipment.

Miscellaneous — includes laboratories, farm facilities, outbuildings, utilities, glass and pottery manufacturing, mining, communications, and nucleonics.

SOURCE OF IGNITION — the actual equipment, device or object which brings about ignition.

Heating Equipment — includes central heating unit, service water heater, space heater, fireplace, chimney, flue pipe and steam or hot water pipe.

Cooking Equipment — includes stove, range, food warming appliance, deep fat fryer, broiler and portable cooking unit.

Smoker's Material — cigarettes, matches and lighters used for smokers' materials, pipes and cigars.

Electrical Distribution Equipment — includes dryer, air conditioning equipment, pressing iron, internal combustion engine, tarpot and incinerator.

Open Flames — includes matches and lighters not associated with smokers' material, candles, cutting torches, welding equipment and hot ashes.

Exposure — includes exposure from an attached or detached structure, lumber yard, open fire, forest, grass and brush.

Miscellaneous — includes heat treatment equipment, industrial oven, printing equipment, fireworks, conveyors, commercial and industrial machinery, and chemical reactions.

DIRECTORY

HEAD OFFICE:

Room 701
10808 — 99 Avenue
Edmonton, Alberta
T5K 0G2
Phone: 427-8392

REGIONAL OFFICES AT:

CALGARY: Deerfoot Junction
Tower 3
1212 — 31 Avenue, N.E.
T2E 7S8
Phone: 230-4710

EDMONTON: Room 303
Princeton Place
10339 — 124 Street
T5N 3W1
Phone: 427-4853

GRANDE PRAIRIE: Room 3401
10320 — 99 Street
T8V 2H4
Phone: 539-2243

LETHBRIDGE: Room 360
Provincial Building
200 — 5 Avenue S.
T1J 4C7
Phone: 329-5483

PEACE RIVER: Bag 900, Box 24
9621 — 96 Avenue
T0H 2X0
Phone: 624-6163

RED DEER: 4920 — 51 Street
Box 5002
T4N 5Y5
Phone: 343-5157

ST. PAUL: Room 407
Provincial Building
5025 — 49 Avenue
T0A 3A0
Phone: 645-6349

VERMILION: Drawer 388
T0B 4M0
Phone: 853-2811

ALBERTA FIRE TRAINING SCHOOL:

Drawer 388
VERMILION, Alberta
T0B 4M0
Phone: 853-5800